

=> d que

L1 STR

N=C=O
1 2 3

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

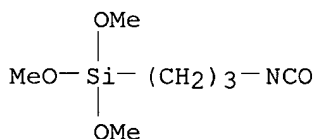
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE

L8 85788 SEA FILE=REGISTRY SSS FUL L1
L10 15991 SEA FILE=REGISTRY ABB=ON PLU=ON PETH/PCT AND F/ELS
L11 514 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 AND L10
L15 257 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND (SURFAC? OR COAT?)
L17 15084 SEA FILE=HCAPLUS ABB=ON PLU=ON OILPROOF? OR OIL(3A) (PROOF?
OR RESIST? OR REPEL?) OR "OIL RESERVOIRS"/CT
L18 15084 SEA FILE=HCAPLUS ABB=ON PLU=ON "OILPROOFING AGENTS"/CT OR
L17
L19 3652 SEA FILE=HCAPLUS ABB=ON PLU=ON ("WATERPROOFING AGENTS"/CT OR
"WATERPROOF MATERIALS"/CT OR "WATERPROOFING (L) AGENTS"/CT OR
"AGENTS WATERPROOFING"/CT OR "MOISTURE PROOF COATING"/CT OR
"WATERPROOFING COATINGS"/CT OR "WATERPROOFING MATERIALS"/CT)
L20 81895 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 OR WATERPROOF? OR
WATER(3A) (PROOF? OR RESIST? OR REPEL?)
L21 2638 SEA FILE=HCAPLUS ABB=ON PLU=ON OLIGOURETHAN? OR OLIGOMER?(3A)
(URETHAN? OR POLYURETHAN?)
L22 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L21
L23 14 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L20 AND L15
L24 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 OR L23

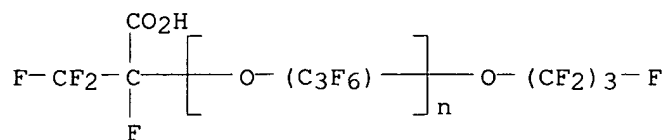
L24 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 2002:293575 HCAPLUS
 DN 136:313880
 TI Compositions comprising fluorinated polyether silanes for rendering
 substrates **oil and water repellent**
 IN Dams, Rudolf J.; Fieuws, Francesca M.; Martin, Steven J.; Terrazas,
 Michael S.; Pellerite, Mark J.
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002030848	A1	20020418	WO 2001-US42622	20011010
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI US 2000-689013	A	20001012		
AB A compn. for treating a substrate, to make it oil and water repellent , comprises a homogeneous mixt. of: (a) a fluorinated polyether silane of the formula, $Rf1-[Q-SiY3-xR1x]_y$ (I), where Rf1 represents a monovalent or divalent polyfluoropolyether group, Q represents an org. divalent linking group, R1 represents a C1-C4 alkyl group, Y represents a hydrolyzable group; x is 0 or 1 and y is 1 or 2; (b) an org. or an inorg. acid; (c) water and (d) an org. solvent. A method of making such a compn. and the use to treat substrates, such as ceramics and glass, to render them oil and water repellent are described.				
IT 15396-00-6 90317-74-1, Krytox 157FSL 410084-15-0 410084-16-1 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (oil/water repellent compns.; compns. comprising fluorinated polyether silanes for rendering substrates oil and water repellent)				
RN 15396-00-6	HCAPLUS			
CN	Silane, (3-isocyanatopropyl)trimethoxy- (9CI) (CA INDEX NAME)			



RN 90317-74-1 HCAPLUS

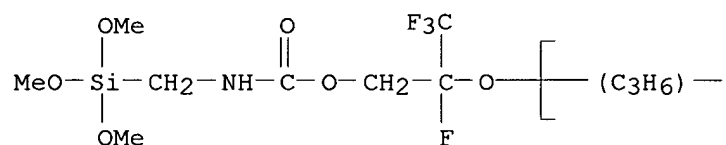
CN Poly[oxy[trifluoro(trifluoromethyl)-1,2-ethanediyl]], .alpha.-(1-carboxy-1,2,2,2-tetrafluoroethyl)-.omega.-(heptafluoropropoxy)- (9CI) (CA INDEX NAME)



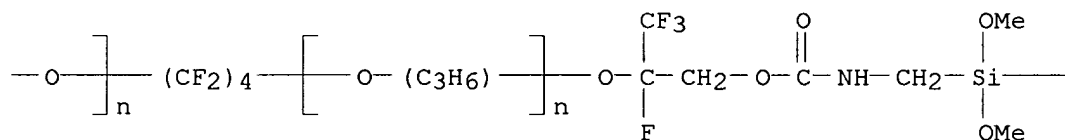
RN 410084-15-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



PAGE 1-B



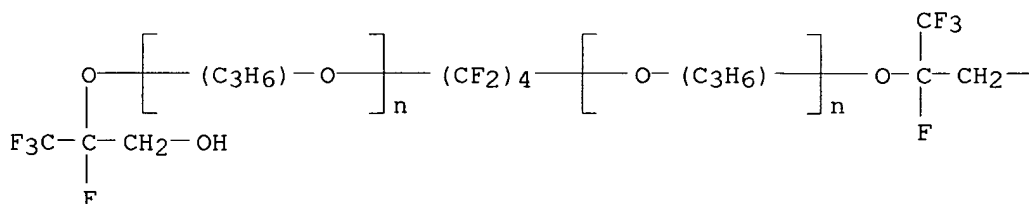
PAGE 1-C

---OMe

RN 410084-16-1 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A



PAGE 1-B

—OH

IC ICM C04B041-84
ICS C03C017-30; C09D004-00
CC 57-9 (Ceramics)
Section cross-reference(s): 38
ST fluorinated polyether silane substrate treatment **oil**
water repellent
IT Tiles
(ceramic, white glazed; compns. comprising fluorinated polyether
silanes for rendering substrates **oil** and **water**
repellent)
IT Epoxy resins, uses
Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(**coatings**; compns. comprising fluorinated polyether silanes
for rendering substrates **oil** and **water**
repellent)
IT Wood
(compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
IT **Oilproofing agents**
Waterproofing agents
(fluorinated polyether silane; compns. comprising fluorinated polyether
silanes for rendering substrates **oil** and **water**
repellent)
IT Acids, uses
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM
(Technical or engineered material use); USES (Uses)
(inorg., **oil/water repellent** compns.;
compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
IT Carboxylic acids, uses
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM
(Technical or engineered material use); USES (Uses)
(**oil/water repellent** compns.; compns.
comprising fluorinated polyether silanes for rendering substrates
oil and **water repellent**)
IT Solvents
(org., **oil/water repellent** compns.;
compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
IT Acids, uses
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM
(Technical or engineered material use); USES (Uses)
(org., **oil/water repellent** compns.;
compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(paint; compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
IT Polysiloxanes, uses

- RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(polyester-polyether-, **oil/water repellent**
compns.; compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
- IT Polyethers, uses
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(polyester-siloxane-, **oil/water repellent**
compns.; compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
- IT Polyesters, uses
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(polyether-siloxane-, **oil/water repellent**
compns.; compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
- IT Enamels (vitreous)
Linoleum
(substrate; compns. comprising fluorinated polyether silanes for
rendering substrates **oil** and **water repellent**)
- IT Galvanized steel
Glass, uses
Polyesters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(substrate; compns. comprising fluorinated polyether silanes for
rendering substrates **oil** and **water repellent**)
- IT Ceramics
(substrates; compns. comprising fluorinated polyether silanes for
rendering substrates **oil** and **water repellent**)
- IT 12597-69-2, Steel, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(chromated, substrate; compns. comprising fluorinated polyether silanes
for rendering substrates **oil** and **water repellent**)
- IT 7429-90-5, Aluminum, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(foil; compns. comprising fluorinated polyether silanes for rendering
substrates **oil** and **water repellent**)
- IT 64-17-5, Ethanol, uses 64-19-7, Acetic acid, uses 67-64-1, Acetone,
uses 75-65-0, tert-Butanol, uses 77-92-9, Citric acid, uses 78-93-3,
Methyl ethyl ketone, uses 108-20-3, Diisopropyl ether 406-58-6,
HFC-365 1067-33-0, Dibutyltindiacetate 1634-04-4, tert-Butyl methyl
ether 3069-42-9, Octadecyltrimethoxysilane 9004-74-4, Poly(ethylene
glycol)monomethyl ether **15396-00-6 90317-74-1**, Krytox
157FSL 107852-49-3D, Fomblin Z-DEAL, reaction product with
3-aminopropyltriethoxysilane 107852-49-3D, Fomblin Z-DEAL, reaction
product with 3-aminopropyltrimethoxysilane 132324-09-5D, Dynamar FC
2202, reaction product with 3-chloropropyltrimethoxysilane
132324-09-5D, Dynamar FC 2202, reaction product with
trimethoxysilylpropylisocyanate 163702-07-6, Methyl perfluorobutyl ether
219484-64-7, HFE-7100 **410084-15-0 410084-16-1**
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(**oil/water repellent** compns.; compns. comprising fluorinated polyether silanes for rendering substrates **oil and water repellent**)

IT 7440-50-8, Copper, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plate; compns. comprising fluorinated polyether silanes for rendering substrates **oil and water repellent**)

IT 9003-53-6, Polystyrene 9003-54-7, Styrene acrylonitrile copolymer
 9011-14-7, Polymethylmethacrylate 25038-59-9, Polyethyleneterephthalate, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (substrate; compns. comprising fluorinated polyether silanes for rendering substrates **oil and water repellent**)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 2002:142819 HCAPLUS
 DN 136:201928
 TI Urethane-based stain-release **coatings**
 IN Fan, Wayne W.; Martin, Steven J.; Qiu, Zai-Ming; Terrazas, Michael S.
 PA 3M Innovative Properties Company, USA
 SO PCT Int. Appl., 81 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002014443	A2	20020221	WO 2001-US22059	20010712
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI US 2000-225061P	P	20000814		
US 2000-226049P	P	20000816		
US 2001-804447	A	20010312		

AB This invention relates to chem. compns. comprising .gtoreq.1 urethaneoligomers of .gtoreq.2 repeating units selected from the group consisting of F-contg. **urethane oligomers** and long-chain hydrocarbon-contg. **urethane oligomers**. These **urethane oligomers** comprise the reaction product of (a) .gtoreq.1 polyfunctional isocyanate compds., (b) .gtoreq.1 polyols, (c) .gtoreq.1 monoalcs. selected from the group consisting of fluorochem. monoalcs., optionally substituted long-chain hydrocarbon monoalcs., and mixts., (d) .gtoreq.1 silanes; and optionally (e) .gtoreq.1 water-solubilizing compds. comprising .gtoreq.1 water-solubilizing groups and .gtoreq.1 isocyanate-reactive H contg. group. The chem. compns. can be applied as **coatings** and these **coatings** can impart stain-release characteristics and resist being worn-off due to wear and

abrasion. The water-sol. N-3300-C4F9SO2N(CH2CH2OH)2-glycolic acid-3-aminopropyltriethoxysilane condensate methyldiethanolamine salt form was **coated** as a 3% soln. on slate tile; showing excellent stain resistance to grape juice, transmission fluid, motor oil, wine, coffee, brake fluid, and corn oil.

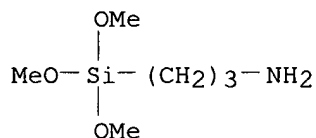
IT **400782-26-5DP**, reaction products with fluoroalc. or hydrocarbon alc. **400782-27-6DP**, reaction products with fluoroalc. or hydrocarbon alc.
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (fluorine-contg. urethane-based stain-release **coatings** on hard **surfaces**)
 RN 400782-26-5 HCAPLUS
 CN 1-Propanol, 3,3'-[(1,1,2,2,3,3,4,4-octafluoro-1,4-butanediyl)bis(oxy)]bis[2,2,3,3-tetrafluoro-, polymer with Desmodur N 3300 and 3-(trimethoxysilyl)-1-propanamine (9CI) (CA INDEX NAME)
 CM 1
 CRN 104559-01-5
 CMF Unspecified
 CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

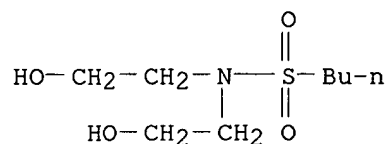
CM 2
 CRN 43181-25-5
 CMF C10 H6 F16 O4

HO-CH2-CF2-CF2-O-(CF2)4-O-CF2-CF2-CH2-OH

CM 3
 CRN 13822-56-5
 CMF C6 H17 N O3 Si



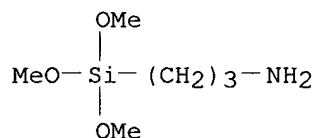
RN 400782-27-6 HCAPLUS
 CN 1-Butanesulfonamide, N,N-bis(2-hydroxyethyl)-, polymer with 1,6-diisocyanatohexane and 3-(trimethoxysilyl)-1-propanamine (9CI) (CA INDEX NAME)
 CM 1
 CRN 400781-89-7
 CMF C8 H19 N O4 S



CM 2

CRN 13822-56-5

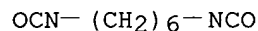
CMF C6 H17 N O3 Si



CM 3

CRN 822-06-0

CMF C8 H12 N2 O2



IC ICM C09D175-04

ICS C08G018-28

CC 42-10 (Coatings, Inks, and Related Products)

ST hard **surface** stain release **coating** fluoro polyurethaneIT **Coating** materials(antistaining, water-, soil-, wear-; fluorine-contg. urethane-based stain-release **coatings** on hard **surfaces**)

IT Concrete

Slate

Tiles

(fluorine-contg. urethane-based stain-release **coatings** on hard **surfaces**)

IT Limestone, miscellaneous

Marble

RL: MSC (Miscellaneous)

(fluorine-contg. urethane-based stain-release **coatings** on hard **surfaces**)

IT Wood

(pine; fluorine-contg. urethane-based stain-release **coatings** on hard **surfaces**)

IT 111-87-5DP, 1-Octanol, reaction products with urethane-silane condensate salt 112-30-1DP, 1-Decanol, reaction products with urethane-silane condensate salt 112-53-8DP, 1-Dodecanol, reaction products with urethane-silane condensate salt 112-72-1DP, 1-Tetradecanol, reaction

products with urethane-silane condensate salt 112-92-5DP, 1-Octadecanol, reaction products with urethane-silane condensate salt 307-30-2DP, reaction products with urethane-silane condensate salt 375-01-9DP, 2,2,3,3,4,4,4-Heptafluorobutanol, reaction products with urethane-silane condensate salt 377-66-2DP, reaction products with urethane-silane condensate salt 647-42-7DP, reaction products with urethane-silane condensate salt 24448-09-7DP, reaction products with urethane-silane condensate salt 28788-68-3DP, Perfluorocyclohexylmethanol, reaction products with urethane-silane condensate salt 36653-82-4DP, 1-Hexadecanol, reaction products with urethane-silane condensate salt 400781-88-6DP, reaction products with fluoroalc. or hydrocarbon alc. 400781-88-6DP, reaction products with urethane-silane condensate salt 400781-91-1DP, reaction products with fluoroalc. or hydrocarbon alc. 400781-93-3DP, reaction products with fluoroalc. or hydrocarbon alc. 400781-95-5DP, reaction products with fluoroalc. or hydrocarbon alc. 400781-97-7DP, reaction products with fluoroalc. or hydrocarbon alc. 400781-98-8DP, reaction products with urethane-silane condensate salt 400781-99-9DP, reaction products with urethane-silane condensate salt 400782-00-5DP, reaction products with urethane-silane condensate salt 400782-02-7DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-04-9DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-06-1DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-08-3DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-10-7DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-12-9DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-14-1DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-16-3DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-18-5DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-20-9DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-21-0DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-22-1DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-23-2DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-24-3DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-25-4DP, reaction products with fluoroalc. or hydrocarbon alc. **400782-26-5DP**, reaction products with fluoroalc. or hydrocarbon alc. **400782-27-6DP**, reaction products with fluoroalc. or hydrocarbon alc. 400782-32-3DP, reaction products with fluoroalc. or hydrocarbon alc. 400782-34-5DP, reaction products with fluoroalc. or hydrocarbon alc.

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(fluorine-contg. urethane-based stain-release **coatings** on hard **surfaces**)

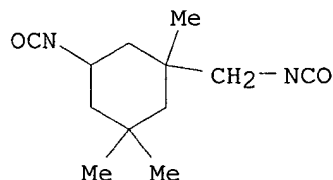
L24 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 2000:876782 HCAPLUS
 DN 134:43472
 TI Fluorinated **oligourethanes**
 IN Turri, Stefano; Levi, Marinella; Trombetta, Tania
 PA Ausimont S.p.A., Italy
 SO Eur. Pat. Appl., 17 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

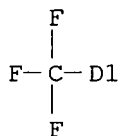
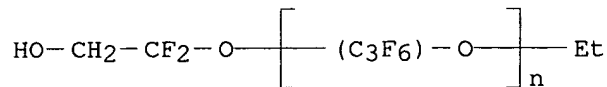
PI EP 1059319 A2 20001213 EP 2000-112141 20000606
 EP 1059319 A3 20020123
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 2001019736 A2 20010123 JP 2000-176155 20000612
 PRAI IT 1999-MI1303 A 19990611
 AB Fluorinated **oligourethanes**, having no. av. mol. wt. lower than
 or equal to 9,000 and a branched structure, are formed of the following
 monomers and macromers: (a) aliph., cycloaliph. or arom. polyisocyanates,
 (b) X0(CR1AR2A)bY0 [R1A, R2A = H or C1-10 aliph. radical; b = 1-20; X0 =
 OH or SH; Y0 = anionic or cationic salifiable function or when X0 = OH, b
 = 1, R1A = R2A = H, and Y0 = CH2O(CH2CH2O)nMe, n = 3-20]; one or more of
 the following compds.: (c) bifunctional hydroxyl (per)fluoropolyethers
 (PFPE diols) having no. av. mol. wt. in the range 400-3,000, (e)
 monofunctional hydroxyl (per)fluoropolyethers or monofunctional hydroxyl
 (per)fluoroalkanes (e'), having no. av. mol. wt. in the range 300-1,000;
 and, optionally, the following compds.: (d) X0(CR1AR2A)bY0 (R1A, R2A, b,
 and X0 = same as above; Y0 = oxiranyl, OCOR1BC:CH2, Si(ORx)3, CH2CH:CH2,
 or OCH:CH2; R1B = H or Me; Rx = C1-5 alkyl); (d1) hydrogen-active compds.,
 capable to form bonds with the NCO functions stable at the hydrolysis but
 weak at heat. These **oligourethanes** are useful as **water**
 - and **oil-repellent coatings** for substrates
 with high porosity. A typical IPDI-based **oligourethane** was
 manufd. by stirring a soln. contg. 45 g Vestanat T1890, 51 g EtOAc, 6.189
 g dimethylaminopropanol, 0.6 mL 20% Fascat 4224 soln. 1 h at 70.degree.,
 adding 240 g EtOAc and 68.1 g HOCH2CF2O(CF2CF2O)p(CF2O)qCF2CH2OH (p/q =
 2.2) and heating 8 h at reflux.
 IT **822-06-0DP**, HDI, polyisocyanurate-polyoxyperfluoroalkylene-
 polyurethanes, reaction products with dimethylaminopropanol
4098-71-9DP, IPDI, polyisocyanurate-polyoxyperfluoroalkylene-
 polyurethanes, reaction products with dimethylaminopropanol
313273-48-2DP, reaction products with polyisocyanurate-
 polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (fluorinated **oligourethanes** for **water**- and
oil-resistant coatings for porous
 substrates)
 RN 822-06-0 HCAPLUS
 CN Hexane, 1,6-diisocyanato- (9CI) (CA INDEX NAME)

OCN-(CH2)6-NCO

RN 4098-71-9 HCAPLUS
 CN Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- (9CI) (CA
 INDEX NAME)



RN 313273-48-2 HCAPLUS
 CN Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], .alpha.-
 [chlorotrifluoro(trifluoromethyl)ethyl]-.omega.-(1,1-difluoro-2-
 hydroxyethoxy)- (9CI) (CA INDEX NAME)



D1-Cl

3 (D1-F)

IC ICM C08G018-38
 ICS C08G018-50
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 35
 ST fluorine contg **oligourethane waterproof**
oilproof coating porous substrate; dimethylaminopropanol
 modified polyoxyperfluoroalkylene **oligourethane** manuf
 IT **Coating materials**
 (oil-resistant; fluorinated **oligourethanes**
 for water- and oil-resistant
coatings for porous substrates)
 IT Polyurethanes, uses
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (polyisocyanurate-polyoxyalkylene-, fluorine-contg., reaction products,
 with dimethylaminopropanol; fluorinated **oligourethanes** for
water- and **oil-resistant coatings**
 for porous substrates)
 IT Fluoropolymers, uses
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (polyisocyanurate-polyoxyalkylene-polyurethane-, reaction products,
 with dimethylaminopropanol; fluorinated **oligourethanes** for
water- and **oil-resistant coatings**
 for porous substrates)
 IT Polyoxyalkylenes, uses
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (polyisocyanurate-polyurethane-, fluorine-contg., reaction products,
 with dimethylaminopropanol; fluorinated **oligourethanes** for
water- and **oil-resistant coatings**

- for porous substrates)
- IT Polyisocyanurates
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-polyurethane-, fluorine-contg., reaction products, with dimethylaminopropanol; fluorinated **oligourethanes** for **water-** and **oil-resistant coatings** for porous substrates)
- IT Coating materials
(**water-resistant**; fluorinated **oligourethanes** for **water-** and **oil-resistant coatings** for porous substrates)
- IT 96-29-7DP, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol 818-61-1DP, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol **822-06-0DP**, HDI, polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes, reaction products with dimethylaminopropanol 3179-63-3DP, 3-(Dimethylamino)propanol, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes **4098-71-9DP**, IPDI, polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes, reaction products with dimethylaminopropanol 73666-46-3DP, Vestanat T1890, polymers with polyoxyperfluoroalkylene diols, reaction products with dimethylaminopropanol 138861-14-0DP, Tolonate HDT-LV, polymers with polyoxyperfluoroalkylene diols, reaction products with dimethylaminopropanol **313273-48-2DP**, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluorinated **oligourethanes** for **water-** and **oil-resistant coatings** for porous substrates)

L24 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:865387 HCAPLUS

DN 134:43455

TI Liquid radiation-curable polyurethane acrylate compositions with low viscosity and Young's modulus and optical fibers **coated** therewith

IN Kosakai, Shohei; Asano, Masatoshi; Ueno, Masaya; Kondo, Kazunori; Kaneko, Ichiro; Kobayashi, Toshimi

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000344844	A2	20001212	JP 1999-155434	19990602
AB	The compns. contain multifunctional polyoxyalkylene- polyurethane (meth)acrylate oligomers [contg. .gtoreq.2 terminal (meth)acrylic groups], R1O(R2O)nC(O)NHR2NHCO2R4O2CCR5:CH2 [R1 = p-R6C6H4, p-PhCMe2C6H4; R2 = C1-4 satd. hydrocarbylene; R3 = 4-methyl-1,3-phenylene, methylene(trimethyl-1,3-cyclohexylene); R4 = hydrocarbylene; R5 = H, Me; R6 = C1-20 satd. hydrocarbyl; n = 5-300], ethylenically unsatd. compds.,				

and light polymn. initiators. Thus, a 15.3:39.7:45:1.5 mixt. of a **polyurethane monoacrylate oligomer** [A; prepd. from Aronix M 113 (polyethylene glycol nonylphenyl ether acrylate), 2,4-TDI, 2-hydroxyethyl acrylate, and polypropylene glycol monononylphenyl ether], a **polyurethane acrylate oligomer** (prepd. from Aronix M 113, polypropylene glycol, 2,4-TDI, A, polypropylene triol, and 2-hydroxyethyl acrylate), Aronix M 113, and Lucirin TPO (initiator) was UV-irradiated on a glass plate to give a film showing Young's modulus 0.075 and 0.18 kg/mm², at 25 and -40.degree., resp., elongation at break 130%, and tensile strength 0.081 kg/cm².

IT **312930-62-4P 312932-19-7P**

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(radiation-curable polyoxyalkylene-polyurethane acrylate compns. with low Young's modulus for optical fibers **coating**)

RN 312930-62-4 HCAPLUS

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with 2,4-diisocyanato-1-methylbenzene, 1-ethenylhexahydro-2H-azepin-2-one, .alpha.-hydro-.omega.-hydroxypoly[oxy(1,4-butanediyl)], .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], .alpha.-[[[methyl-3-[[2-[(1-oxo-2-propenyl)oxy]ethoxy]carbonyl]amino]phenyl]amino]carbonyl]-.omega.-(4-methylphenoxy)poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)] and .alpha.-(1-oxo-2-propenyl)-.omega.-(4-nonylphenoxy)poly[oxy-1,2-ethanediyl] (9CI) (CA INDEX NAME)

CM 1

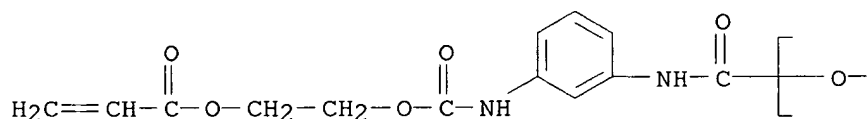
CRN 312930-61-3

CMF (C3 F6 O)_n C21 H22 N2 O6

CCI IDS, PMS

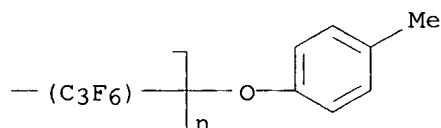
CDES *

PAGE 1-A



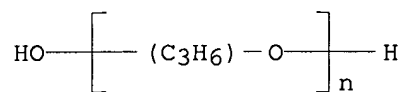
D1-Me

PAGE 1-B



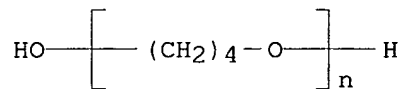
CM 2

CRN 25322-69-4
 CMF (C3 H6 O)_n H2 O
 CCI IDS, PMS
 CDES 8:ID



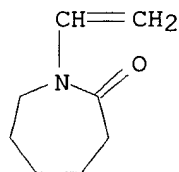
CM 3

CRN 25190-06-1
 CMF (C4 H8 O)_n H2 O
 CCI PMS



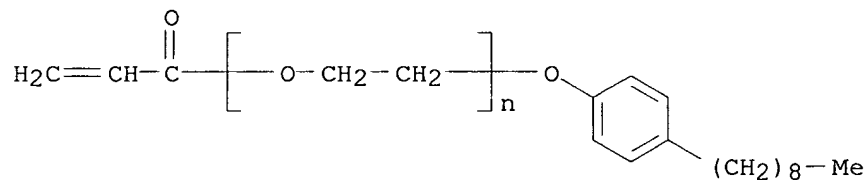
CM 4

CRN 2235-00-9
 CMF C8 H13 N O



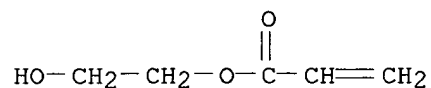
CM 5

CRN 2073-54-3
 CMF (C2 H4 O)_n C18 H26 O2
 CCI PMS



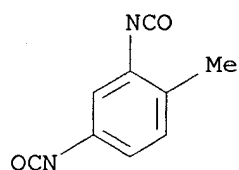
CM 6

CRN 818-61-1
CMF C5 H8 O3



CM 7

CRN 584-84-9
CMF C9 H6 N2 O2

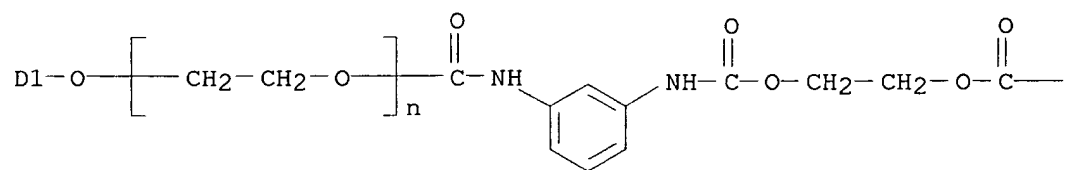
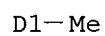
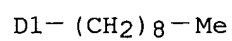


RN 312932-19-7 HCAPLUS
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with 2,4-diisocyanato-1-methylbenzene, 1-ethenylhexahydro-2H-azepin-2-one, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], .alpha.-[[methyl-3-[[[2-[(1-oxo-2-propenyl)oxy]ethoxy]carbonyl]amino]phenyl]amino]carbonyl]-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) and .alpha.-(1-oxo-2-propenyl)-.omega.-(4-nonylphenoxy)poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

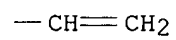
CM 1

CRN 312930-58-8
CMF (C2 H4 O)_n C29 H38 N2 O6
CCI IDS, PMS
CDES *

PAGE 1-A



PAGE 1-B



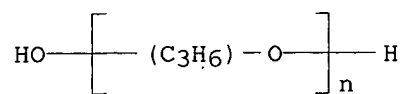
CM 2

CRN 25322-69-4

CMF (C3 H6 O)n H2 O

CCI IDS, PMS

CDES 8:ID

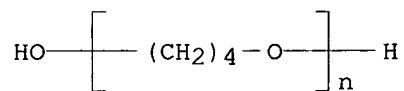


CM 3

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

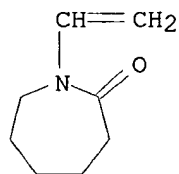
CCI PMS



CM 4

CRN 2235-00-9

CMF C8 H13 N O

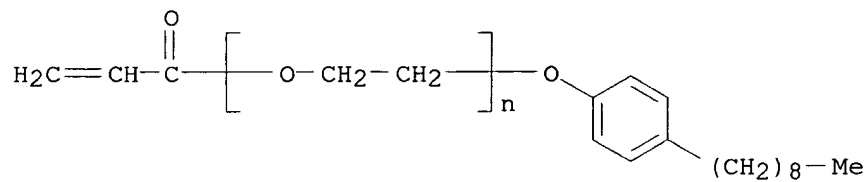


CM 5

CRN 2073-54-3

CMF (C2 H4 O)_n C18 H26 O2

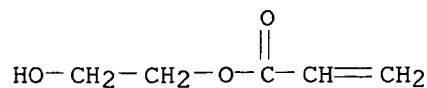
CCI PMS



CM 6

CRN 818-61-1

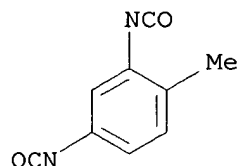
CMF C5 H8 O3



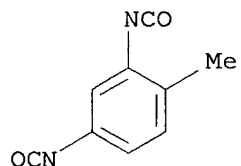
CM 7

CRN 584-84-9

CMF C9 H6 N2 O2



IT **584-84-9DP**, 2,4-Tolylene diisocyanate, polymers with polypropylene glycol diol and triol derivs., reaction products with hydroxyethyl acrylate **311311-65-6DP**, Polypropylene glycol-polytetramethylene glycol-2,4-tolylene diisocyanate copolymer, reaction products with hydroxyethyl acrylate
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (radiation-curable polyoxyalkylene-polyurethane acrylate compns. with low Young's modulus for optical fibers **coating**)
 RN 584-84-9 HCAPLUS
 CN Benzene, 2,4-diisocyanato-1-methyl- (9CI) (CA INDEX NAME)



RN 311311-65-6 HCAPLUS
 CN Poly(oxy-1,4-butanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with 2,4-diisocyanato-1-methylbenzene and .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)], block (9CI) (CA INDEX NAME)

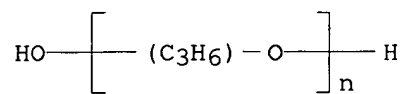
CM 1

CRN 25322-69-4

CMF (C3 H6 O)_n H2 O

CCI IDS, PMS

CDES 8:ID

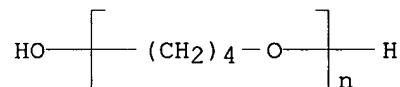


CM 2

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

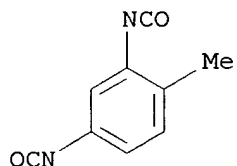
CCI PMS



CM 3

CRN 584-84-9

CMF C9 H6 N2 O2



- IC ICM C08F290-06
ICS C03C025-24; C08F002-50; C09D005-00; C09D175-14; G02B006-44
- CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 73
- ST radiation curable polyurethane acrylate low viscosity; polyoxyalkylene
polyurethane monoacrylate **oligomer** UV curing; optical
fiber **coating** urethane acrylate crosslinking
- IT **Coating** materials
(UV-curable; radiation-curable polyoxyalkylene-polyurethane acrylate
comps. with low Young's modulus for optical fibers **coating**)
- IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or
engineered material use); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)
(diol and triol derivs., polymers with tolylene diisocyanate, reaction
products with hydroxyethyl acrylate; radiation-curable
polyoxyalkylene-polyurethane acrylate comps. with low Young's modulus
for optical fibers **coating**)
- IT Polyurethanes, uses
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or
engineered material use); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)
(polyoxyalkylene-, acrylate-terminated; radiation-curable
polyoxyalkylene-polyurethane acrylate comps. with low Young's modulus

- for optical fibers **coating**)
- IT Polyurethanes, uses
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polyoxyalkylene-, acrylic; radiation-curable polyoxyalkylene-polyurethane acrylate compns. with low Young's modulus for optical fibers **coating**)
- IT Optical fibers
 (radiation-curable polyoxyalkylene-polyurethane acrylate compns. with low Young's modulus for optical fibers **coating**)
- IT 2073-54-3DP, Aronix M 113, polymers with polyurethane acrylates
 312930-57-7DP, polymers with polyurethane acrylate and polyethylene glycol nonylphenyl ether acrylate 312930-59-9DP, polymers with polyurethane acrylate and polyethylene glycol nonylphenyl ether acrylate
312930-62-4P 312932-19-7P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (radiation-curable polyoxyalkylene-polyurethane acrylate compns. with low Young's modulus for optical fibers **coating**)
- IT **584-84-9DP**, 2,4-Tolylene diisocyanate, polymers with polypropylene glycol diol and triol derivs., reaction products with hydroxyethyl acrylate 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with polyoxyalkylene-polyurethane 25322-69-4DP, Polypropylene glycol, diol and triol derivs., polymers with tolylene diisocyanate, reaction products with hydroxyethyl acrylate **311311-65-6DP**, Polypropylene glycol-polytetramethylene glycol-2,4-tolylene diisocyanate copolymer, reaction products with hydroxyethyl acrylate 312930-57-7P 312930-58-8P 312930-59-9P 312930-60-2P
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (radiation-curable polyoxyalkylene-polyurethane acrylate compns. with low Young's modulus for optical fibers **coating**)

L24 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:626403 HCAPLUS

DN 131:258876

TI Spinning oil for synthetic fibers and process for treating synthetic fibers

IN Sakai, Shusuke; Yoshida, Hiroshi; Kato, Masahiro

PA Sanyo Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

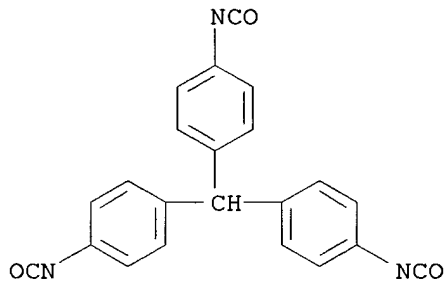
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 9949126	A1	19990930	WO 1998-JP1390	19980326
	W: CN, ID, KR, US				
	WO 9943884	A1	19990902	WO 1999-JP534	19990205
	W: CN, ID, KR, US				
PRAI	JP 1998-62325	A	19980225		
	WO 1998-JP1390	A	19980326		
	JP 1998-178031	A	19980609		
	JP 1998-202776	A	19980701		
AB	A spinning oil contains a polyether lubricant and an oligomer having a				

```

IT 2422-91-5D, 4,4',4''-Triphenylmethane triisocyanate,
    fluorine-contg. urethane oligomers 200413-68-9
    , Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene
    glycol monoacrylate copolymer 240132-96-1D, Ethylene
    oxide-perfluorooctylmethyloxirane-propylene oxide copolymer,
    fluorine-contg. urethane oligomers 240413-35-8
    , Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene
    glycol butyl ether acrylate copolymer 240413-37-0, Adipic
    acid-polyoxyethylene oxypropylene trimethylolpropane ether copolymer
    perfluorononanoate 244794-60-3
    RL: MOA (Modifier or additive use); USES (Uses)
        (spinning oil for synthetic fibers contg. polyethers and oligomers)
RN 2422-91-5 HCAPLUS
CN Benzene, 1,1',1''-methylidynetris[4-isocyanato- (9CI) (CA INDEX NAME)

```



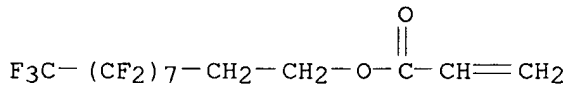
```

RN      200413-68-9   HCAPLUS
CN      2-Propenoic acid, 2-methyl-, methyl ester, polymer with
        3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate and
        methyloxirane polymer with oxirane mono-2-propenoate (9CI)  (CA INDEX
        NAME)

CM      1

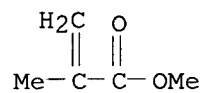
CRN     27905-45-9
CMF     C13 H7 F17 O2

```



CM 2

CRN 80-62-6
CMF C5 H8 O2

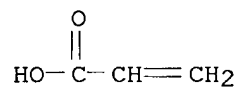


CM 3

CRN 9041-78-5
CMF (C3 H6 O . C2 H4 O)x . C3 H4 O2
CDES 8:GD,ESTER

CM 4

CRN 79-10-7
CMF C3 H4 O2

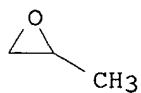


CM 5

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 6

CRN 75-56-9
CMF C3 H6 O



CM 7

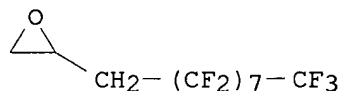
CRN 75-21-8
CMF C2 H4 O



RN 240132-96-1 HCAPLUS

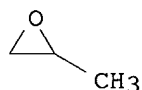
CM 1

CRN 38565-53-6
CMF C11 H5 F17 O



CM 2

CRN 75-56-9
CMF C3 H6 O



CM 3

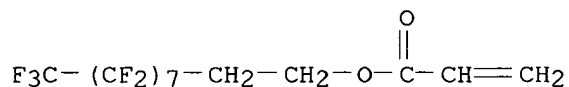
CRN 75-21-8
CMF C2 H4 O



CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate and
methyloxirane polymer with oxirane mono-2-propenoate butyl ether (9CI)
(CA INDEX NAME)

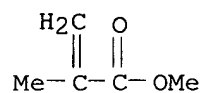
CM 1

CRN 27905-45-9
CMF C13 H7 F17 O2



CM 2

CRN 80-62-6
CMF C5 H8 O2

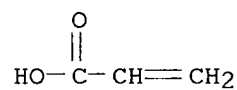


CM 3

CRN 9078-95-9
CMF C4 H10 O . (C3 H6 O . C2 H4 O)x . C3 H4 O2
CDES 8:GD,ESTER,ETHER

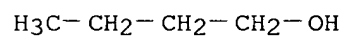
CM 4

CRN 79-10-7
CMF C3 H4 O2



CM 5

CRN 71-36-3
CMF C4 H10 O

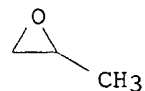


CM 6

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 7

CRN 75-56-9
CMF C3 H6 O



CM 8

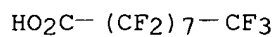
CRN 75-21-8
CMF C2 H4 O



RN 240413-37-0 HCAPLUS
CN Hexanedioic acid, polymer with methyloxirane polymer with oxirane ether
with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1),
heptadecafluorononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 375-95-1
CMF C9 H F17 O2

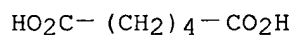


CM 2

CRN 240413-36-9
CMF (C6 H14 O3 . C6 H10 O4 . 3 (C3 H6 O . C2 H4 O)x)x
CCI PMS

CM 3

CRN 124-04-9
CMF C6 H10 O4

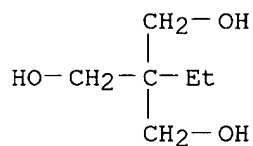


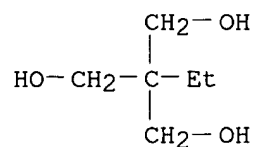
CM 4

CRN 52624-57-4
CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x
CDES 8:GD,ETHER

CM 5

CRN 77-99-6
CMF C6 H14 O3





CM 6

CRN 9003-11-6

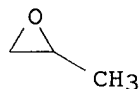
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 7

CRN 75-56-9

CMF C3 H6 O



CM 8

CRN 75-21-8

CMF C2 H4 O



RN 244794-60-3 HCAPLUS

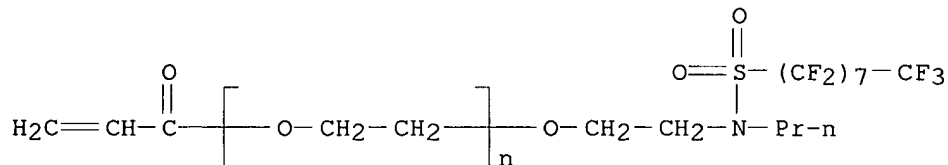
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 .alpha.-(1-oxo-2-propenyl)-.omega.-[2-[(heptadecafluorooctyl)sulfonyl]pro-
 pylamino]ethoxy]poly(oxy-1,2-ethanediyl) and .alpha.-(1-oxo-2-propenyl)-
 .omega.-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 50858-55-4

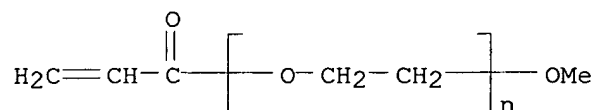
CMF (C2 H4 O)n C16 H14 F17 N O4 S

CCI PMS



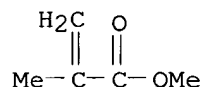
CM 2

CRN 32171-39-4
 CMF (C2 H4 O)n C4 H6 O2
 CCI PMS



CM 3

CRN 80-62-6
 CMF C5 H8 O2



IC ICM D06M015-37
 ICS D06M013-165; D06M013-10
 CC 40-7 (Textiles and Fibers)
 ST synthetic fiber lubricant polyether oligomer; polyester fiber spinning oil
 IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (fluorine-contg. **urethane oligomers**; spinning oil
 for synthetic fibers contg. polyethers and oligomers)
 IT Epoxides
 Fluoropolymers, uses
 Polyesters, uses
Polyurethanes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (**oligomers**; spinning oil for synthetic fibers contg.
 polyethers and oligomers)
 IT Lubricants
 (spinning oil for synthetic fibers contg. polyethers and oligomers)
 IT Polyester fibers, uses
 Synthetic polymeric fibers, uses
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM
 (Technical or engineered material use); PROC (Process); USES (Uses)
 (spinning oil for synthetic fibers contg. polyethers and oligomers)
 IT Polyoxyalkylenes, uses
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
 engineered material use); USES (Uses)
 (spinning oil for synthetic fibers contg. polyethers and oligomers)
 IT 678-39-7D, Perfluorooctylethanol, fluorine-contg. **urethane
 oligomers 2422-91-5D**, 4,4',4''-Triphenylmethane
 triisocyanate, fluorine-contg. **urethane oligomers**
 25322-68-3D, Polyethylene glycol, fluorine-contg. **urethane
 oligomers 200413-68-9**, Methyl methacrylate-

perfluorooctylethyl acrylate-polyethylene propylene glycol monoacrylate copolymer **240132-96-1D**, Ethylene oxide-perfluorooctylmethyloxirane-propylene oxide copolymer, fluorine-contg. **urethane oligomers 240413-35-8**, Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene glycol butyl ether acrylate copolymer **240413-37-0**, Adipic acid-polyoxyethylene oxypropylene trimethylolpropane ether copolymer perfluorononanoate **244794-60-3**

RL: MOA (Modifier or additive use); USES (Uses)

(spinning oil for synthetic fibers contg. polyethers and oligomers)

IT 9003-11-6 9004-81-3, Polyethylene glycol laurate 9065-63-8, Polyethylene propylene glycol butyl ether 113609-82-8, Block polyethylene propylene glycol lauryl ether

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(spinning oil for synthetic fibers contg. polyethers and oligomers)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1999:566243 HCAPLUS

DN 131:186178

TI Spinning lubricant for synthetic fiber and method of treating thermoplastic synthetic fiber

IN Sakai, Shusuke; Yoshida, Hiroshi; Kato, Masahiro

PA Sanyo Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9943884	A1	19990902	WO 1999-JP534	19990205
	W: CN, ID, KR, US				
	WO 9949126	A1	19990930	WO 1998-JP1390	19980326
	W: CN, ID, KR, US				
	JP 2000080561	A2	20000321	JP 1999-48939	19990225
	JP 3032889	B2	20000417		
PRAI	JP 1998-62325	A	19980225		
	WO 1998-JP1390	A	19980326		
	JP 1998-178031	A	19980609		
	JP 1998-202776	A	19980701		
AB	A lubricant comprises .gtoreq.1 polyether and .gtoreq.1 surfactant , in which the surface tension at 100.degree., T100 (mN/m), and the percentage of residues resulting from heating at 500.degree., Re (%), satisfy the relations Re .ltoreq. 5.5 - 0.25T100, 10 .ltoreq. T100 .ltoreq. 22, and 0 .ltoreq. Re .ltoreq. 1. Thus, a lubricant contained a base oil 100, Me methacrylate-perfluorooctylethyl acrylate-polyethylene propylene glycol monoacrylate copolymer 0.05, Na C14-16 alkanesulfonate 0.5, and K polyethylene glycol isostearyl ether phosphate 0.5 part, and the base oil contained polyethylene propylene glycol Bu ether 60, block polyethylene propylene glycol lauryl ether 20, polyethylene propylene glycol 10, and polyethylene glycol laurate 10 parts.				
IT	52550-45-5 , Polyethylene glycol N-perfluorooctylsulfonyl-N-propylaminoethanol ether 75587-26-7D , Polyethylene glycol-4,4',4"-triphenylmethane triisocyanate copolymer, reaction products				

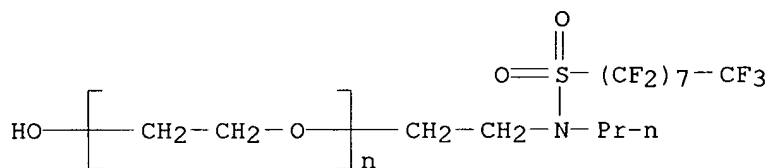
with perfluorooctylethanol and polyethylene glycol-polyethylene propylene glycol Bu ether **200413-68-9**, Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene glycol monoacrylate copolymer **240132-95-0**, Methyl methacrylate-polyethylene glycol methyl ether acrylate-N-propylperfluorooctylsulfonylaminoethyl acrylate copolymer **240132-96-1**, Ethylene oxide-perfluorooctylmethylethylene oxide-propylene oxide copolymer **240413-35-8**, Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene glycol butyl ether acrylate copolymer **240413-37-0**, Adipic acid-polyethylene propylene glycol trimethylolpropane ether copolymer perfluorononanoate **240413-38-1**, Ethylene oxide-perfluorooctylmethylethylene oxide-propylene oxide copolymer monobutyl ether

RL: MOA (Modifier or additive use); USES (Uses)

(spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)

RN 52550-45-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[(heptadecafluorooctyl)sulfonyl]propylamino]ethyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 75587-26-7 HCAPLUS

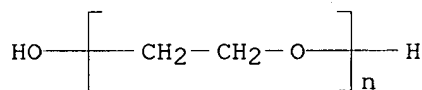
CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with 1,1',1''-methylidynetris[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C2 H4 O)_n H2 O

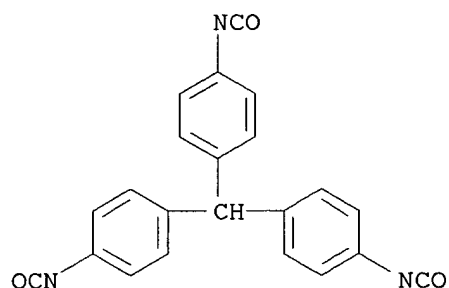
CCI PMS



CM 2

CRN 2422-91-5

CMF C22 H13 N3 O3



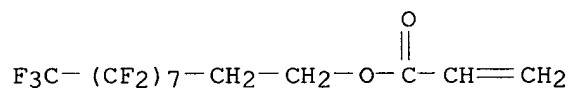
RN 200413-68-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate and
methyloxirane polymer with oxirane mono-2-propenoate (9CI) (CA INDEX
NAME)

CM 1

CRN 27905-45-9

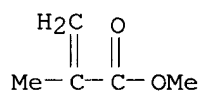
CMF C13 H7 F17 O2



CM 2

CRN 80-62-6

CMF C5 H8 O2



CM 3

CRN 9041-78-5

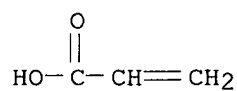
$$\text{CMF} = (\text{C}_3 \text{ H}_6 \text{ O} \cdot \text{C}_2 \text{ H}_4 \text{ O})_x \cdot \text{C}_3 \text{ H}_4 \text{ O}_2$$

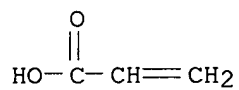
CDES 8:GD, ESTER

CM 4

CRN 79-10-7

CMF C3 H4 O2





CM 5

CRN 9003-11-6

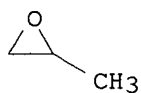
CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8

CMF C2 H4 O



RN 240132-95-0 HCAPLUS

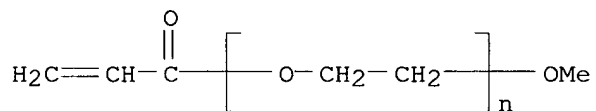
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 2-[[(heptadecafluorooctyl)sulfonyl]propylamino]ethyl 2-propenoate and
 .alpha.-(1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl) (9CI)
 (CA INDEX NAME)

CM 1

CRN 32171-39-4

CMF (C2 H4 O) n C4 H6 O2

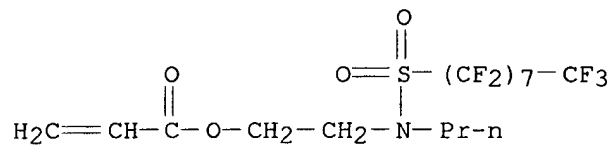
CCI PMS



CM 2

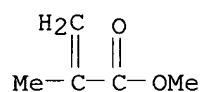
CRN 2357-60-0

CMF C16 H14 F17 N O4 S



CM 3

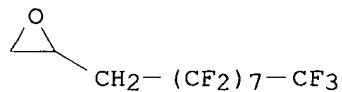
CRN 80-62-6
CMF C5 H8 O2



RN 240132-96-1 HCAPLUS
CN Oxirane, (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptafluorononyl)-,
polymer with methyloxirane and oxirane (9CI) (CA INDEX NAME)

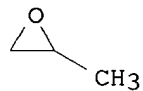
CM 1

CRN 38565-53-6
CMF C11 H5 F17 O



CM 2

CRN 75-56-9
CMF C3 H6 O



CM 3

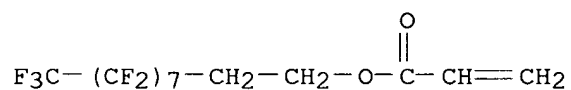
CRN 75-21-8
CMF C2 H4 O



RN 240413-35-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl 2-propenoate and
 methyloxirane polymer with oxirane mono-2-propenoate butyl ether (9CI)
 (CA INDEX NAME)

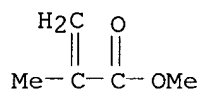
CM 1

CRN 27905-45-9
 CMF C13 H7 F17 O2



CM 2

CRN 80-62-6
 CMF C5 H8 O2

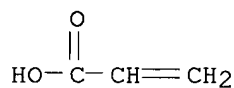


CM 3

CRN 9078-95-9
 CMF C4 H10 O . (C3 H6 O . C2 H4 O)x . C3 H4 O2
 CDES 8:GD,ESTER,ETHER

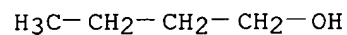
CM 4

CRN 79-10-7
 CMF C3 H4 O2



CM 5

CRN 71-36-3
 CMF C4 H10 O



CM 6

CRN 9003-11-6

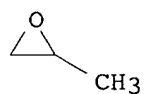
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 7

CRN 75-56-9

CMF C3 H6 O



CM 8

CRN 75-21-8

CMF C2 H4 O



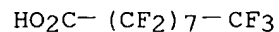
RN 240413-37-0 HCAPLUS

CN Hexanedioic acid, polymer with methyloxirane polymer with oxirane ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), heptadecafluorononanoate (9CI) (CA INDEX NAME)

CM 1

CRN 375-95-1

CMF C9 H F17 O2



CM 2

CRN 240413-36-9

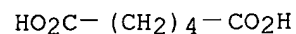
CMF (C6 H14 O3 . C6 H10 O4 . 3 (C3 H6 O . C2 H4 O)x)x

CCI PMS

CM 3

CRN 124-04-9

CMF C6 H10 O4



CM 4

CRN 52624-57-4

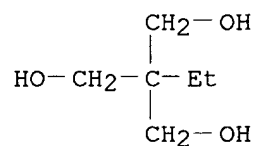
CMF C6 H14 O3 . 3 (C3 H6 O . C2 H4 O)x

CDES 8:GD,ETHER

CM 5

CRN 77-99-6

CMF C6 H14 O3



CM 6

CRN 9003-11-6

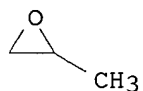
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 7

CRN 75-56-9

CMF C3 H6 O



CM 8

CRN 75-21-8

CMF C2 H4 O



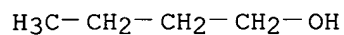
RN 240413-38-1 HCAPLUS

CN Oxirane, (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptafluorononyl)-,

polymer with methyloxirane and oxirane, monobutyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 71-36-3
CMF C4 H10 O

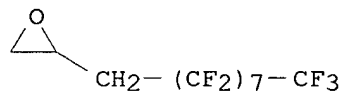


CM 2

CRN 240132-96-1
CMF (C11 H5 F17 O . C3 H6 O . C2 H4 O)x
CCI PMS

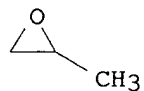
CM 3

CRN 38565-53-6
CMF C11 H5 F17 O



CM 4

CRN 75-56-9
CMF C3 H6 O



CM 5

CRN 75-21-8
CMF C2 H4 O



IC D06M015-53; D06M015-277; D01F011-08
CC 40-7 (Textiles and Fibers)
ST polyether **surfactant** spinning lubricant; polyethylene propylene glycol spinning lubricant; polypropylene ethylene glycol spinning

- lubricant; **surface** tension spinning lubricant
- IT Sulfonic acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (C14-16-alkanesulfonic, sodium salts; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT **Surfactants**
 (anionic; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT **Surfactants**
 (cationic; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me polysiloxane-; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Polysiloxanes, uses
 Polysiloxanes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me, polyoxyalkylene-; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT **Surfactants**
 (nonionic; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Polyurethanes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (polyether-, reaction products with perfluorooctylethanol; spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Lubricants
Surface tension
Surfactants
 (spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Quaternary ammonium compounds, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Synthetic polymeric fibers, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Polyethers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT Polyoxyalkylenes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)
- IT 678-39-7D, Perfluorooctylethanol, reaction products with **urethane oligomers** 2795-39-3, Potassium perfluorooctylsulfonate 52550-45-5, Polyethylene glycol N-perfluorooctylsulfonyl-N-propylaminoethanol ether 75587-26-7D, Polyethylene glycol-4,4',4"-triphenylmethane triisocyanate copolymer, reaction products with perfluorooctylethanol and polyethylene glycol-polyethylene propylene glycol Bu ether 129710-09-4, Triethylmethylammonium phthalate, uses 172274-70-3, Potassium polyethylene glycol isostearyl ether phosphate

176707-41-8 **200413-68-9**, Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene glycol monoacrylate copolymer
240132-95-0, Methyl methacrylate-polyethylene glycol methyl ether acrylate-N-propylperfluorooctylsulfonaminoethyl acrylate copolymer
240132-96-1, Ethylene oxide-perfluorooctylmethylethylene oxide-propylene oxide copolymer **240413-35-8**, Methyl methacrylate-perfluorooctylethyl acrylate-polyethylene propylene glycol butyl ether acrylate copolymer **240413-37-0**, Adipic acid-polyethylene propylene glycol trimethylolpropane ether copolymer perfluorononanoate **240413-38-1**, Ethylene oxide-perfluorooctylmethylethylene oxide-propylene oxide copolymer monobutyl ether

RL: MOA (Modifier or additive use); USES (Uses)

(spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)

IT 9003-11-6 9004-81-3, Polyethylene glycol laurate 9065-63-8, Polyethylene propylene glycol butyl ether 113609-82-8, Block polyethylene propylene glycol lauryl ether

RL: TEM (Technical or engineered material use); USES (Uses)

(spinning lubricants contg. polyethers and **surfactants** for synthetic fibers)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:299532 HCAPLUS

DN 126:279057

TI Manufacture of grafted acrylic fluoropolymers for **water-** and **oil-repellent** solvent-type **coatings**

IN Ito, Yumiko; Kojima, Shiro

PA Toa Gosei Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09067417	A2	19970311	JP 1995-250236	19950904
	JP 3048041	B2	20000605		
AB	<p>The graft polymers are manufd. by copolyng. (A) radically polymerizable monomers and (B) macromers which have radically polymerizable terminal on 1 end and total methacrylate-type monomer content .gtoreq.70%, and are composed of (a) perfluoroalkyl (meth)acrylates 20-65, (b) alkyl (meth)acrylates 25-80, and (c) .gtoreq.1 monomer selected from hydroxyalkyl (meth)acrylates and polyalkylene glycol mono(meth)acrylates 0-10%. Thus, polyng. perfluorooctylethyl methacrylate 30, Me methacrylate 50, and iso-Bu methacrylate at 90.degree. in MIBK in the presence of mercaptopropionic acid and 2,2'-azobis(2-methylbutyronitrile), adding 2.7 g glycidyl methacrylate to the reactor with hydroquinone monomethyl ether, Bu4NBr, and MIBK, and reacting while blowing air at 90.degree. gave a macromer with no.-av. mol. wt. (Mn) 6000, 5 parts of which was reacted with hydroxyethyl methacrylate 13, acrylic acid 2, styrene 30, and Bu methacrylate 50 parts in BuOAc-xylene mixt. in the presence of 2,2'-azobis(dimethylvaleronitrile) to give a graft copolymer with Mn 8000. A 40%-solid coating contg. the graft copolymer soln., a HMDI-type polyisocyanate, dibutyltin dilaurate, and MIBK was applied onto</p>				

Al plate and cured at 25.degree. for a week to give test pieces showing good gloss and **resistance** to **water**, **oil**, staining, and weather.

IT **822-06-0D**, polymers

RL: MOA (Modifier or additive use); USES (Uses)

(hardeners; manuf. of grafted acrylic fluoropolymers for **water**
- and **oil-repellent** solvent-type **coatings**
)

RN 822-06-0 HCAPLUS

CN Hexane, 1,6-diisocyanato- (9CI) (CA INDEX NAME)

OCN- (CH₂)₆-NCO

IT **188938-57-0P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manuf. of grafted acrylic fluoropolymers for **water**- and
oil-repellent solvent-type **coatings**)

RN 188938-57-0 HCAPLUS

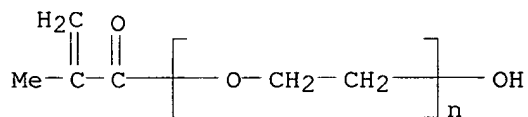
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene, ethyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl), 2-methylpropyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)_n C4 H6 O2

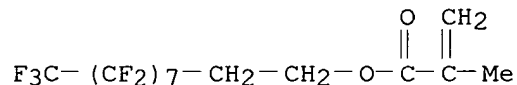
CCI PMS



CM 2

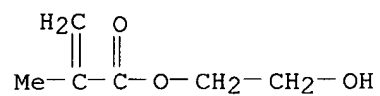
CRN 1996-88-9

CMF C14 H9 F17 O2



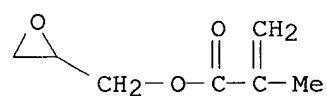
CM 3

CRN 868-77-9
CMF C6 H10 O3



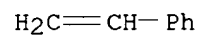
CM 4

CRN 106-91-2
CMF C7 H10 O3



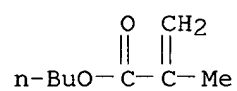
CM 5

CRN 100-42-5
CMF C8 H8



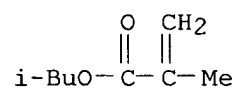
CM 6

CRN 97-88-1
CMF C8 H14 O2

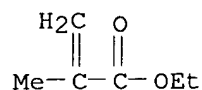


CM 7

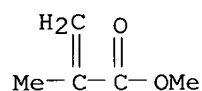
CRN 97-86-9
CMF C8 H14 O2



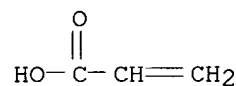
CM 8

CRN 97-63-2
CMF C6 H10 O2

CM 9

CRN 80-62-6
CMF C5 H8 O2

CM 10

CRN 79-10-7
CMF C3 H4 O2

- IC ICM C08F220-26
ICS C08F299-00; C09D133-14
- CC 42-7 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
- ST acrylic fluoropolymer macromer grafting **waterproofing coating; oilproofing coating** acrylic fluoropolymer macromer grafting
- IT **Oil-resistant** materials
(**coatings**; manuf. of grafted acrylic fluoropolymers for **water-** and **oil-repellent** solvent-type **coatings**)
- IT Acrylic polymers, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluorine-contg., graft; manuf. of grafted acrylic fluoropolymers for **water-** and **oil-repellent** solvent-type **coatings**)
- IT **Water-resistant coatings**
(manuf. of grafted acrylic fluoropolymers for **water-** and **oil-repellent** solvent-type **coatings**)
- IT Chemically **resistant coatings**

(**oil-resistant**; manuf. of grafted acrylic fluoropolymers for **water-** and **oil-repellent** solvent-type **coatings**)

IT **822-06-0D**, polymers
 RL: MOA (Modifier or additive use); USES (Uses)
 (hardeners; manuf. of grafted acrylic fluoropolymers for **water** - and **oil-repellent** solvent-type **coatings**)

IT 188938-56-9P **188938-57-0P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manuf. of grafted acrylic fluoropolymers for **water-** and **oil-repellent** solvent-type **coatings**)

L24 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 1997:88759 HCAPLUS
 DN 126:105430

TI Aqueous compositions containing fluorocarbon group-containing polymers and **surfactants** for improved antisoiling properties and fibrous substrates treated therewith

IN Boardman, Gail S.; Martin, Steven J.; Otteson, Aaron D.; Linert, Jeffrey G.; Wolf, Pamela A.; Alm, Roger R.
 PA Minnesota Mining and Mfg. Co., USA
 SO PCT Int. Appl., 43 pp.
 CODEN: PIXXD2

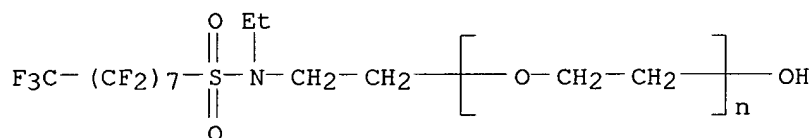
DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9638622	A1	19961205	WO 1996-US5873	19960425
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5714082	A	19980203	US 1995-458457	19950602
	CA 2219894	AA	19961205	CA 1996-2219894	19960425
	AU 9656684	A1	19961218	AU 1996-56684	19960425
	AU 699909	B2	19981217		
	EP 828888	A1	19980318	EP 1996-913847	19960425
	R: BE, DE, DK, FR, GB, IT, NL				
	JP 11506170	T2	19990602	JP 1996-536478	19960425
PRAI	US 1995-458457		19950602		
	WO 1996-US5873		19960425		
AB	Title compns. for treating fibrous substrates to render them durably resistant to dry soil and durably repellent to water and oil , comprise an aq. emulsion of a dry soil- resistant and water- and oil-repellent fluorocarbyl-contg. polymer or oligomer and .gtoreq.1 surfactant contg. 1 or 2 fluorocarbyl and 1 or 2 water-solubilizing polar groups, and, optionally .gtoreq.1 nonfluorinated additive/extender. Thus, a com. nylon 66 carpet was padded with water, sprayed with a mixt. of 0.14% (solids on fiber) Scotchgard FX 1373M (aq. fluorochem. urethane emulsion) and 0.10% (solids on fiber) C7F15CO2-N(C4H9)4 (45% soln. in aq. iso-PrOH), cured 15 min at 250.degree.F, and subjected to walk-on testing (10,000 passes) to show 49% improvement in soiling resistance.				
IT	29117-08-6 , Fluorad FC 170C				
	RL: TEM (Technical or engineered material use); USES (Uses)				

(Fluorad FC 170C, **surfactant**; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

RN 29117-08-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



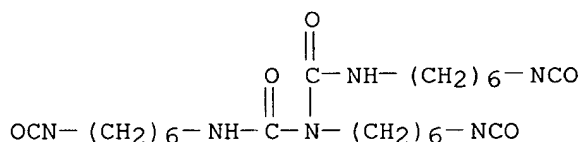
IT **4035-89-6DP**, reaction products with stearyl alc.

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

RN 4035-89-6 HCAPLUS

CN Imidodicarbonic diamide, N,N',2-tris(6-isocyanatohexyl)- (9CI) (CA INDEX NAME)



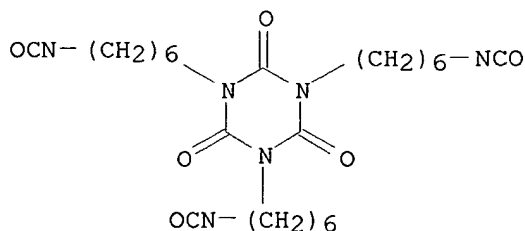
IT **3779-63-3DP**, reaction products with Me ethanolammonium perfluorooctylsulfonate and ethylene glycol

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**surfactant**; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

RN 3779-63-3 HCAPLUS

CN 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(6-isocyanatohexyl)- (9CI) (CA INDEX NAME)



IT **65545-80-4**, Zonyl FSN 100 **68958-61-2**, Fluorad FC 171

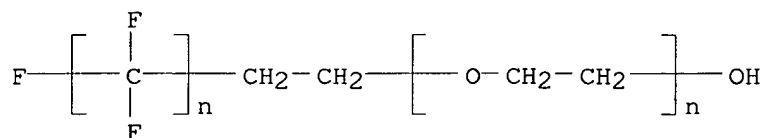
RL: TEM (Technical or engineered material use); USES (Uses)

(**surfactant**; aq. compns. contg. fluorocarbon group-contg.

polymers and **surfactants** for improved antisoiling properties on carpets)

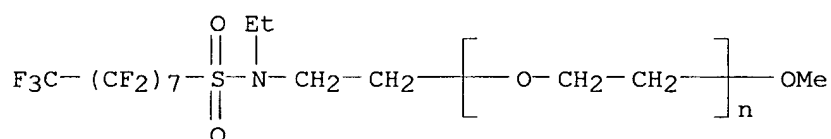
RN 65545-80-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with .alpha.-fluoro-.omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1) (9CI) (CA INDEX NAME)



RN 68958-61-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)



IC ICM D06M015-277

ICS D06M015-576; D06M015-437; D06M013-213; D06M013-236

CC 40-9 (Textiles and Fibers)

ST fluorine contg polymer **surfactant** mixt carpet; soilproofing carpet fluoro **surfactant** mixt; **waterproofing** carpet fluoro **surfactant** mixt; **oilproofing** carpet fluoro **surfactant** mixt

IT **Waterproofing**

(agents; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

IT Fabrics

Leather

Paper

(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties)

IT Carpets

Oilproofing agents

Soilproofing agents

(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

IT Polyamide fibers, miscellaneous

RL: MSC (Miscellaneous)

(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

IT Fluoropolymers, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)

IT Polyurethanes, uses

- RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg.; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyurethane-; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT 67906-42-7, Fluorad FC 120
RL: TEM (Technical or engineered material use); USES (Uses)
(Fluorad FC 120, **surfactant**; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT **29117-08-6**, Fluorad FC 170C
RL: TEM (Technical or engineered material use); USES (Uses)
(Fluorad FC 170C, **surfactant**; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT 107-21-1DP, 1,2-Ethanediol, reaction products with Desmodur N 3300 and Me ethanolammonium perfluorooctylsulfonate 112-92-5DP, 1-Octadecanol, reaction products with Desmodur N 100 **4035-89-6DP**, reaction products with stearyl alc. 24448-09-7DP, reaction products with Desmodur N 3300 and ethylene glycol 53200-31-0DP, Desmodur N 100, reaction products with stearyl alc. 104559-01-5DP, Desmodur N 3300, reaction products with Me ethanolammonium perfluorooctylsulfonate and ethylene glycol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT 72247-41-7 113834-58-5, Scotchgard FC 358 185684-41-7 185829-38-3, Duratech 185829-40-7, Scotchgard FC 1355 185829-42-9, Scotchgard FX 1373M
RL: TEM (Technical or engineered material use); USES (Uses)
(aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT 33454-82-9, Lithium trifluoromethanesulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(**surfactant**, Fluorad FC 122; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT 2991-51-7, Fluorad FC 129
RL: TEM (Technical or engineered material use); USES (Uses)
(**surfactant**, Fluorad FC 129; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT **3779-63-3DP**, reaction products with Me ethanolammonium perfluorooctylsulfonate and ethylene glycol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**surfactant**; aq. compns. contg. fluorocarbon group-contg. polymers and **surfactants** for improved antisoiling properties on carpets)
- IT 1652-63-7, Fluorad FC 135 2795-39-3, Fluorad FC 95 9014-85-1, Surfynol 440 10124-31-9D, Ammonium phosphate, fluoroalkyl derivs. 12751-11-0, Fluorad FC 98 55120-78-0 **65545-80-4**, Zonyl FSN 100

68958-61-2, Fluorad FC 171 82784-95-0, Zonyl FSJ 83653-37-6,
Zonyl FSE 95658-53-0 98241-25-9 112972-61-9 141607-32-1
185829-58-7, Zonyl NF

RL: TEM (Technical or engineered material use); USES (Uses)
(**surfactant**; aq. compns. contg. fluorocarbon group-contg.
polymers and **surfactants** for improved antisoiling properties
on carpets)

L24 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1994:136059 HCAPLUS

DN 120:136059

TI Perfluoroalkyl halides and derivatives as precursors for **oil** and
water repellants and **surfactants**

IN Behr, Frederick E.; Dams, Rudolf J.; DeWitte, Johan E.; Hagen, Donald F.

PA Minnesota Mining and Mfg. Co., USA

SO Can. Pat. Appl., 67 pp.

CODEN: CPXXEB

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2071596	AA	19930111	CA 1992-2071596	19920618
	EP 526976	A1	19930210	EP 1992-305710	19920622
	EP 526976	B1	19970115		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	JP 05345732	A2	19931227	JP 1992-183345	19920710
	JP 3231844	B2	20011126		
PRAI	US 1991-728184	A	19910710		

OS MARPAT 120:136059

AB The title compds. comprise a mixt. of straight and branched perfluoroalkyl groups bonded to Cl, Br, or I through a F-free alkylene group. Perfluorodecyltetrahydroiodide (prepd. from perfluorosulfonyl fluoride, 40% straight and 60% branched, treated first with I, then with C₂H₄) was derivatized to thiol functionality by treatment with thiourea in EtOH to give perfluorodecyltetrahydrothiol (I). I was added to a reaction mixt. contg. hexamethoxymethylmelamine to give a I-melamine condensate (II, 1:4 mol ratio). A 50/50 polyester/cotton fabric blend was treated with an emulsion of II at 0.3%, dried and cured at 150.degree., to give a fabric with **oil resistance** (AATCC 118-1975) 5 and 5 after 1 dry cleaning, vs. 3 and 2, resp., for a precursor perfluorodecyltetrahydroiodide having all straight chain perfluoroalkyl groups.

IT **150944-47-1P**

RL: PREP (Preparation)

(linear and branched, prepn. of, as anionic nonionic **surfactant**
)

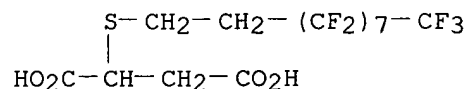
RN 150944-47-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[3-carboxy[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]-1-oxopropyl]-.omega.-methoxy-, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 60279-99-4

CMF C14 H9 F17 O4 S

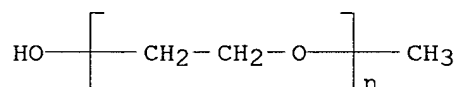


CM 2

CRN 9004-74-4

CMF (C2 H4 O)_n C H4 O

CCI PMS



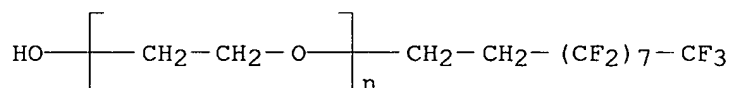
IT 58228-15-2P 150997-16-3P

RL: PREP (Preparation)

(linear and branched, prepn. of, as nonionic **surfactant**)

RN 58228-15-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)-.omega.-hydroxy- (9CI) (CA INDEX NAME)



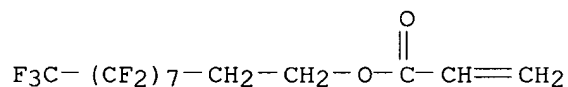
RN 150997-16-3 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl ester, polymer with methyloxirane polymer with oxirane di-2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 27905-45-9

CMF C13 H7 F17 O2



CM 2

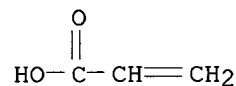
CRN 52503-44-3

CMF (C3 H6 O . C2 H4 O)_x . 2 C3 H4 O2

CDES 8:GD,ESTER

CM 3

CRN 79-10-7
CMF C3 H4 O2

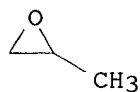


CM 4

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O) x
CCI PMS

CM 5

CRN 75-56-9
CMF C3 H6 O

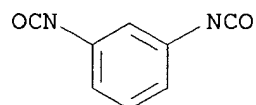


CM 6

CRN 75-21-8
CMF C2 H4 O



IT **26471-62-5DP**, TDI, reaction product with propargyl alc. adduct
with perfluorooctyltetrahydrothiol
RL: PREP (Preparation)
(linear and branched, prepn. of, as treatment agent for fibers for
water resistance)
RN 26471-62-5 HCAPLUS
CN Benzene, 1,3-diisocyanatomethyl- (9CI) (CA INDEX NAME)



D1-Me

IC ICM C08L027-12
ICS C09D004-00; C09D127-12; C09D175-04; C08L075-04

CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): 23, 40, 46

ST perfluoroalkyl halide prepn deriv; perfluorodecyltetrahydroiodide reaction
thiourea; melamine perfluorothiol condensate treatment fabric;
water repellent perfluoroalkyl halide deriv; **oil repellent** perfluoroalkyl halide deriv; **surfactant**
perfluoroalkyl halide deriv

IT **Water-resistant** materials
(fluorochem. compds. contg. perfluoroalkyl groups, for textiles)

IT **Surfactants**
(amphoteric, fluorochem. compds. contg. linear and branched
perfluoroalkyl groups, prepn. of)

IT **Surfactants**
(anionic, fluorochem. compds. contg. linear and branched perfluoroalkyl
groups, prepn. of)

IT Textiles
(cotton-polyester, **water repellent** agents for,
chlorochem. intermediate as, contg. perfluoroalkyl groups)

IT Polyoxyalkylenes, preparation
RL: PREP (Preparation)
(fluorine-contg., contg. linear and branched perfluoroalkyl groups,
prepn. of, for manuf. of nonionic **surfactants**)

IT **Surfactants**
(nonionic, fluorochem. compds. contg. linear and branched
perfluoroalkyl groups, prepn. of)

IT Fluoropolymers
RL: PREP (Preparation)
(polyoxyalkylene-, contg. linear and branched perfluoroalkyl groups,
prepn. of, for manuf. of nonionic **surfactants**)

IT 109-55-7 111-40-0, Diethylene triamine 112-24-3, Triethylene tetramine
RL: USES (Uses)
(linear and branched, Michael addn. of, with
perfluoroalkyltetrahydroacrylate)

IT 678-39-7P
RL: PREP (Preparation)
(linear and branched, prepn. and conversion of to acrylate)

IT 865-86-1P 2043-47-2P 27854-31-5P 27905-45-9P 30389-25-4P
34143-74-3P 34451-25-7P 34451-28-0P 38565-53-6P 52591-27-2P
80233-96-1P 81190-28-5P
RL: PREP (Preparation)
(linear and branched, prepn. of)

IT **150944-47-1P**
RL: PREP (Preparation)
(linear and branched, prepn. of, as anionic nonionic **surfactant**
)

IT 9003-11-6DP, thioethers with tetrahydroperfluorodecanethiol
34143-74-3DP, reaction products with ethylene oxide-propylene oxide
copolymer **58228-15-2P 150997-16-3P**
RL: PREP (Preparation)
(linear and branched, prepn. of, as nonionic **surfactant**)

IT 150909-45-8P 150909-46-9P 150940-87-7P
RL: PREP (Preparation)
(linear and branched, prepn. of, as **surfactant**)

IT 107-19-7DP, 2-Propyn-1-ol, reaction products with
perfluorooctyltetrahydrothiol, urethane acrylate deriv. 678-39-7DP,

- oligomeric urethane** deriv. 3089-11-ODP,
 Hexamethoxymethyl melamine, reaction product with
 perfluorooctyltetrahydrothiol 9016-87-9DP, Polymethylene polyphenylene
 isocyanate, reaction product with perfluorooctyltetrahydro alc.
26471-62-5DP, TDI, reaction product with propargyl alc. adduct
 with perfluorooctyltetrahydrothiol 27905-45-9DP, urethane acrylate
 deriv. 34143-74-3DP, reaction products with propargyl alc., urethane
 acrylate deriv.
 RL: PREP (Preparation)
 (linear and branched, prepn. of, as treatment agent for fibers for
water resistance)
- IT 2043-53-0P 2043-54-1P 2043-55-2P 2043-57-4P
 RL: PREP (Preparation)
 (linear and branched, prepn. of, derivs. from)
- IT 9004-74-4DP, Polyethylene glycol methyl ether, Michael adduct with
 perfluoroalkyltetrahydrothiol 54949-95-0P 149759-83-1P
 150940-85-5DP, Michael adduct with perfluoroalkyltetrahydrothiol
 150944-46-0P 150953-92-7DP, Michael adduct with
 perfluoroalkyltetrahydrothiol 150956-33-5P
 RL: PREP (Preparation)
 (linear and branched, prepn. of, for **surfactant**)
- IT 110-17-8DP, 2-Butenedioic acid (E)-, reaction products with
 perfluorobutylethyl acrylate and AMPS 111-40-0DP, reaction products with
 perfluorobutylethyl acrylate and AMPS 112-24-3DP, reaction products with
 perfluorobutylethyl acrylate and AMPS 52591-27-2DP, reaction products
 with ethylenediamine and AMPS 63225-57-0P 93776-20-6P 93857-44-4P
 148390-66-3DP, reaction products with perfluorobutylethyl acrylate and
 ethylenediamine 149790-22-7P 150940-86-6P 150953-94-9P
 150956-34-6P 150956-35-7P 150956-36-8P 150956-37-9P 151030-75-0DP,
 phosphate ester, ammonium salts 153326-51-3DP, phosphate ester, ammonium
 salts
 RL: PREP (Preparation)
 (linear and branched, prepn. of, for **surfactants**)
- IT 423-60-9, Perfluorooctanesulfonyl chloride 423-62-1,
 Perfluorodecyl iodide 32779-61-6 38436-14-5 40630-30-6 55591-23-6,
 Perfluorohexanesulfonyl chloride 133299-39-5 150940-83-3 150940-84-4
 RL: USES (Uses)
 (linear and branched, reaction of, with ethylene)
- IT 307-35-7, Perfluorooctanesulfonyl fluoride 307-51-7,
 Perfluorodecane sulfonyl fluoride 375-72-4, Perfluorobutanesulfonyl
 fluoride 423-50-7, Perfluorohexanesulfonyl fluoride
 RL: USES (Uses)
 (linear and branched, reaction of, with iodine and ethylene)
- IT 74-85-1, Ethylene, reactions
 RL: RCT (Reactant)
 (linear and branched, reaction of, with perfluoroalkyl iodide)
- IT 814-68-6, Acryloyl chloride
 RL: USES (Uses)
 (linear and branched, reaction of, with perfluoroalkyltetrahydro alc.)
- IT 107-15-3, Ethylene diamine, reactions
 RL: RCT (Reactant)
 (linear and branched, reaction of, with perfluorooctyltetrahydroacrylat
 e)
- L24 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 1992:593685 HCAPLUS
 DN 117:193685

TI Photocurable, fluorine-containing polyurethane acrylate **coating**
compositions

IN Takamatsu, Yukishige; Niimoto, Masaki; Sato, Mitsuo

PA Mitsubishi Rayon K. K., Japan

SO Jpn. Kokai Tokyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04093317	A2	19920326	JP 1990-209675	19900808
AB	The title compns. contain .gtoreq.30% compns. prepd. from polyisocyanates, F-contg. diols, and unsatd. alcs. Thus, coating a mixt. of urethane acrylate (prepd. from 2 mol 2:1 2,4-diisocyanato-1-methylcyclohexane-diethylene glycol (I) adduct (II) with 1 mol H(CF ₂) ₄ CH ₂ OCH ₂ CH(OH)CH ₂ OH and 2 mol 2-hydroxyethyl acrylate (III)) 70, 1,6-hexanediol diacrylate 10, urethane oligomer (prepd. from II 1.2, I 1, and III 0.4 mol) 20, and photoinitiator 3 parts on PVC and curing with UV light gave coatings with good weather and solvent resistance and oil and water repellency .				
IT	132790-72-8D , Tetramethylxylylene diisocyanate, polymers with polycaprolactone diols and fluorinated urethane acrylates 143986-64-5D , polymers with urethane acrylates 144025-39-8 RL: TEM (Technical or engineered material use); USES (Uses) (coatings , photocurable and weather-resistant)				
RN	132790-72-8	HCAPLUS			
RN	143986-64-5	HCAPLUS			
CN	1-Hexanesulfonamide, N-(2,3-dihydroxypropyl)-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-propyl-, polymer with bis(1-isocyanato-1-methylethyl)benzene (9CI) (CA INDEX NAME)				

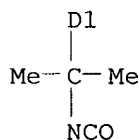
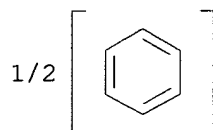
CM 1

CRN 58067-42-8

CMF C14 H16 N2 O2

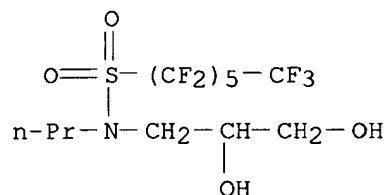
CCI IDS

CDES 8:ID



CM 2

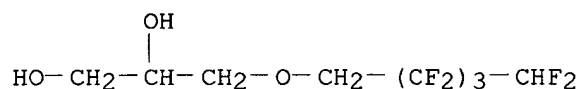
CRN 1644-62-8
CMF C12 H14 F13 N O4 S



RN 144025-39-8 HCAPLUS
CN 2-Propenoic acid, 1,6-hexanediyl ester, polymer with 2,4-diisocyanato-1-methylcyclohexane, 1,2-ethanediol, 2-hydroxypropyl 2-propenoate, 3-[(2,2,3,3,4,4,5,5-octafluoropentyl)oxy]-1,2-propanediol and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

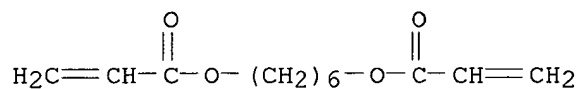
CM 1

CRN 25385-69-7
CMF C8 H10 F8 O3



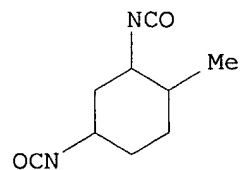
CM 2

CRN 13048-33-4
CMF C12 H18 O4

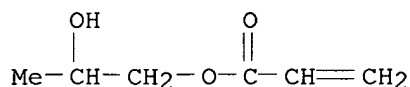


CM 3

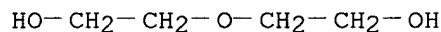
CRN 10581-16-5
CMF C9 H12 N2 O2



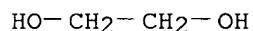
CM 4

CRN 999-61-1
CMF C6 H10 O3

CM 5

CRN 111-46-6
CMF C4 H10 O3

CM 6

CRN 107-21-1
CMF C2 H6 O2

- IC ICM C08G018-67
ICS C08F299-02; C08G018-38
- CC 42-10 (Coatings, Inks, and Related Products)
- ST fluorinated polyurethane acrylate **coating**; photocurable
fluoropolymer acrylate **coating**; weather resistance
coating; PVC **coating** photocurable; hydroxyethyl acrylate
polyurethane **coating**
- IT Urethane polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fluorine-contg., acrylate-terminated, **coatings**, photocurable
and weather-resistant)
- IT **Coating** materials
(photocurable, weather-resistant, fluorine-contg. polyurethane
acrylates)
- IT Urethane polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyester-, fluorine-contg., acrylate-terminated, **coatings**,
photocurable and weather-resistant)
- IT Fluoropolymers
RL: TEM (Technical or engineered material use); USES (Uses)
(polyester-polyurethane-, acrylate-terminated, **coatings**,
photocurable and weather-resistant)
- IT Fluoropolymers
RL: TEM (Technical or engineered material use); USES (Uses)
(polyurethane-, acrylate-terminated, **coatings**, photocurable

and weather-resistant)
 IT 15625-89-5D, Trimethylolpropane triacrylate, polymers with fluorinated urethane acrylates 24980-41-4D, Polycaprolactone, diol derivs., polymers with polyisocyanates and fluorinated urethane acrylates 25248-42-4D, Polycaprolactone, diol derivs., polymers with polyisocyanates and fluorinated urethane acrylates **132790-72-8D**, Tetramethylxylylene diisocyanate, polymers with polycaprolactone diols and fluorinated urethane acrylates **143986-64-5D**, polymers with urethane acrylates **144025-39-8**
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, photocurable and weather-resistant)

L24 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1991:25250 HCAPLUS

DN 114:25250

TI Preparation of vinyl polymers in aqueous dispersions of fluorine-containing polymers

IN Sakai, Takeya; Murai, Osamu; Hayashi, Hiromitsu; Rakutoku, Yumi

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02132101	A2	19900521	JP 1989-131731	19890525
PRAI	JP 1988-197391		19880808		

AB Dispersions for use as **coatings** and adhesives and in paper and fiber processing are prepd. by polymg. vinyl monomers in aq. emulsions of seed fluoropolymers having av. particle diam. 0.001-0.2 .mu.m. A 1:1 styrene-Bu acrylate mixt. was polymd. at 70.degree. in water contg. V 50 and an emulsion of a polymer (av. particle diam. 0.006 .mu.m) prepd. by the reaction of F3C(CF2)7CH2CH2OH with an isocyanate prepolymer prepd. from TDI and propoxylated bisphenol A, giving a dispersion which was stable during 7 days at 50.degree. and formed **coatings** with **oil and water repellency**.

IT **67824-80-0D**, reaction products with fluorinated alcs.

130094-67-6D, reaction products with fluorinated alcs.

130172-70-2

RL: USES (Uses)

(emulsions of, for seed polymn. of vinyl monomers)

RN 67824-80-0 HCAPLUS

CN Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-hydroxy-, polymer with 1,3-diisocyanatomethylbenzene (9CI) (CA INDEX NAME)

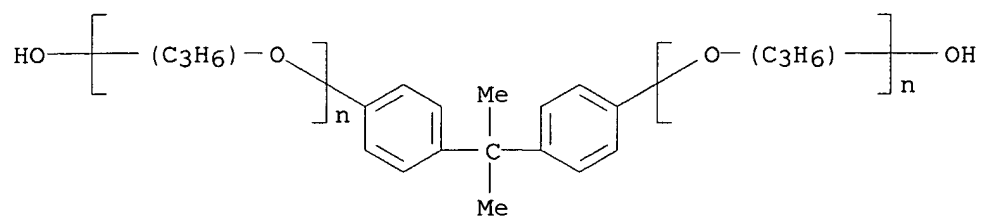
CM 1

CRN 37353-75-6

CMF (C3 H6 O)n (C3 H6 O)n C15 H16 O2

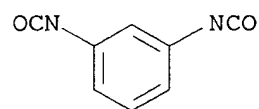
CCI IDS, PMS

CDES 8:ID



CM 2

CRN 26471-62-5
 CMF C9 H6 N2 O2
 CCI IDS
 CDES 8:ID

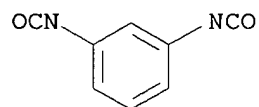


D1-Me

RN 130094-67-6 HCAPLUS
 CN 1,2-Decanediol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-pentadecafluoro-, polymer
 with 1,3-diisocyanatomethylbenzene and .alpha.-hydro-.omega.-
 hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

CM 1

CRN 26471-62-5
 CMF C9 H6 N2 O2
 CCI IDS
 CDES 8:ID

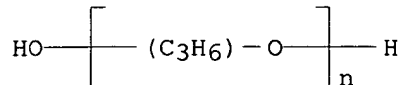


D1-Me

CM 2

CRN 25322-69-4
 CMF (C3 H6 O)n H2 O
 CCI IDS, PMS

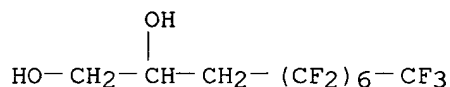
CDES 8:ID



CM 3

CRN 15284-24-9

CMF C10 H7 F15 O2



RN 130172-70-2 HCAPLUS

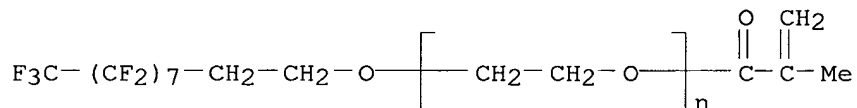
CN 2-Propenoic acid, 2-methyl-, polymer with .alpha.-(2-methyl-1-oxo-2-propenyl)-.omega.-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 109115-52-8

CMF (C2 H4 O)n C14 H9 F17 O2

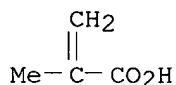
CCI PMS



CM 2

CRN 79-41-4

CMF C4 H6 O2



IC ICM C08F002-22

ICS C08F002-06; C09D005-00; C09D005-02; D06M015-327

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 42

ST fluoropolymer vinyl polymer dispersion; styrene copolymer fluoropolymer dispersion; acrylate copolymer fluoropolymer dispersion; seed polymn vinyl fluoropolymer dispersion; **coating** dispersion vinyl

fluoropolymer; **oil repellency** dispersion
coating; water repellency dispersion
coating

IT Fluoropolymers
 RL: USES (Uses)
 (in seed polymn. of vinyl monomers in aq. emulsions)

IT Polymerization
 (emulsion, seed, of vinyl monomers in presence of fluorinated polymers)

IT **Coating materials**
 (**oil-** and **water-resistant**, vinyl
 polymer-fluoropolymer, prepn. of, by seed polymn. in emulsion)

IT 678-39-7D, reaction products with polyurethane-polyamines 38565-53-6D,
 reaction products with polyurethane-polyamines **67824-80-0D**,
 reaction products with fluorinated alcs. 88581-75-3 93705-98-7
 105134-96-1 122139-55-3D, reaction products with polyurethane-polyamines
 129936-62-5 130094-64-3 130094-65-4 130094-66-5 **130094-67-6D**
 , reaction products with fluorinated alcs. 130117-25-8 130117-31-6
130172-70-2 130212-83-8D, reaction products with
 polyurethane-polyamines 130212-85-0
 RL: USES (Uses)
 (emulsions of, for seed polymn. of vinyl monomers)

IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer 25767-47-9P,
 Butyl acrylate-styrene copolymer 26428-43-3P, Butyl acrylate-glycidyl
 methacrylate-styrene copolymer 60806-47-5P, Butyl acrylate-divinyl
 benzene-styrene copolymer
 RL: PREP (Preparation)
 (manuf. of, in dispersions contg. seed fluoropolymers)

L24 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1987:441476 HCAPLUS

DN 107:41476

TI Polyurethanes

IN Tsukano, Tatsuro; Takegawa, Hisao; Midorikawa, Akio; Baba, Toshihiko

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

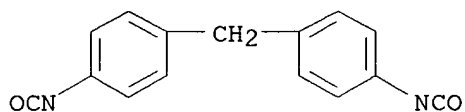
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61252220	A2	19861110	JP 1985-93376	19850430
	JP 04026328	B4	19920507		

AB Polyurethanes having pendant perfluoroalkyl groups show excellent
 toughness, **water** and **oil repellence**,
 abrasion **resistance**, and low **surface** energy. Thus, a
 30% DMF soln. of C8F17SO2N(CH2CH2OH)2 (I) 0.15, poly(oxytetramethylene)
 glycol 0.05, and 1,4-butylene glycol 0.80 equiv was treated with
 4,4-diphenylmethane diisocyanate at 1.03:1 ratio NCO/active H at
 70.degree. to give a polyurethane having viscosity 100,000 cP, no.-av.
 mol. wt. 80,000, and F content 11%, forming a film showing tensile
 strength 810 kg/cm2, elongation 350%, contact angle 110.degree. (H2O) and
 68.degree. (dodecane), and Taber abrasion (after 100 cycles under 100-kg
 load) 75 mg. with nonblocking **surfaces** and good dye-mixing
 property vs. 840 kg/cm2, 330%, 78.degree., 12.degree., and 250 mg, resp.,
 with highly blocking **surfaces** and poor dye-mixing, for a
 polyurethane not contg. I.

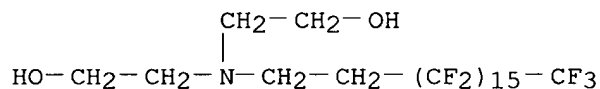
IT 101-68-8D, polyurethane derivs. 109231-80-3
 109267-06-3 109315-87-9
 RL: USES (Uses)
 (rubber, ~~water-~~ and ~~oil-repellent~~,
 abrasion-~~resistant~~, with tack-free ~~surfaces~~)
 RN 101-68-8 HCAPLUS
 CN Benzene, 1,1'-methylenebis[4-isocyanato- (9CI) (CA INDEX NAME)]



RN 109231-80-3 HCAPLUS
 CN Hexanedioic acid, polymer with 1,4-butanediol, 1,1'-methylenebis[4-isocyanatobenzene] and 2,2'-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluorooctadecyl)imino]bis[ethanol] (9CI) (CA INDEX NAME)

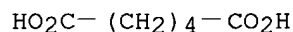
CM 1

CRN 109231-79-0
 CMF C22 H14 F33 N O2



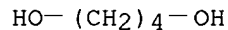
CM 2

CRN 124-04-9
 CMF C6 H10 O4



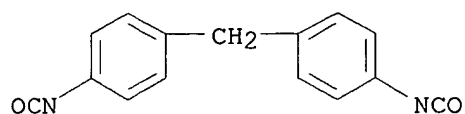
CM 3

CRN 110-63-4
 CMF C4 H10 O2



CM 4

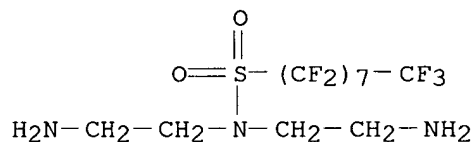
CRN 101-68-8
 CMF C15 H10 N2 O2



RN 109267-06-3 HCAPLUS
 CN Hexanedioic acid, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, N,N-bis(2-aminoethyl)-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-1-octanesulfonamide, 1,4-butanediol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

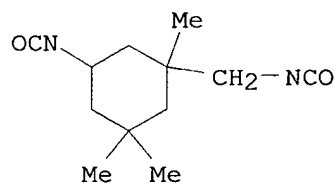
CM 1

CRN 109267-05-2
 CMF C12 H12 F17 N3 O2 S



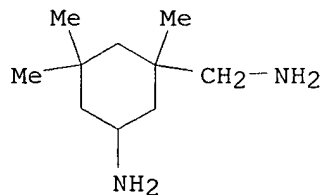
CM 2

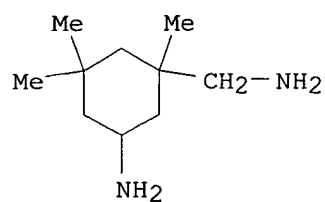
CRN 4098-71-9
 CMF C12 H18 N2 O2



CM 3

CRN 2855-13-2
 CMF C10 H22 N2

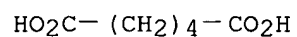




CM 4

CRN 124-04-9

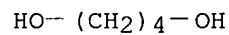
CMF C6 H10 O4



CM 5

CRN 110-63-4

CMF C4 H10 O2



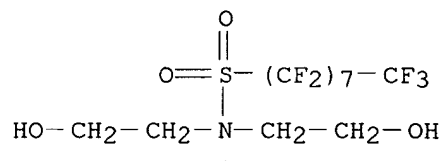
RN 109315-87-9 HCAPLUS

CN 1,4-Butanediol, polymer with 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-N,N-bis(2-hydroxyethyl)-1-octanesulfonamide, .alpha.-hydro-.omega.-hydroxypoly(oxy-1,4-butanediyl) and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 40630-61-3

CMF C12 H10 F17 N O4 S

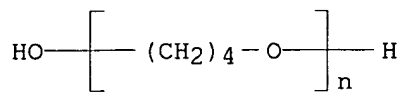


CM 2

CRN 25190-06-1

CMF (C4 H8 O)n H2 O

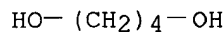
CCI PMS



CM 3

CRN 110-63-4

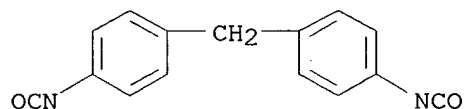
CMF C4 H10 O2



CM 4

CRN 101-68-8

CMF C15 H10 N2 O2



IC ICM C08G018-28

CC 39-4 (Synthetic Elastomers and Natural Rubber)

ST **water repellent** perfluoroalkyl polyurethane rubber;
oil repellent perfluoroalkyl polyurethane; abrasion
 resistance perfluoroalkyl polyurethane; perfluorooctylsulfonamidoethanol
 polyurethane; MDI perfluoroalkyl polyurethane; polyethylene glycol
 perfluoroalkyl polyurethane; butylene glycol perfluoroalkyl polyurethane

IT **Water-resistant** materials

(polyurethane rubber, pendant perfluoroalkyl-contg., **oil-**
repellent, abrasion-**resistant**, with tack-free
surfaces)

IT Abrasion-resistant materials

(polyurethane rubbers, pendant perfluoroalkyl-contg., **oil-**
repellent, with tack-free **surfaces**)

IT Rubber, urethane, compounds

RL: USES (Uses)

(fluorinated, **water-** and **oil-repellent**,
 abrasion-**resistant**, with nonblocking **surfaces**)

IT Urethane polymers, preparation

RL: PREP (Preparation)

(polycarbonate-, rubber, manuf. of **water-** and **oil-**
repellent, abrasion-**resistant**, with tack-free
surfaces)

IT Polycarbonates, preparation

RL: PREP (Preparation)

(polyurethane-, rubber, manuf. of **water-** and **oil-**
repellent, abrasion-**resistant**, with tack-free
surfaces)

IT **101-68-8D**, polyurethane derivs. 107-21-1D, polyurethane derivs.

463-79-6D, polymers, glycol, polyurethane derivs. 25248-42-4D, glycol, polyurethane derivs. 40630-61-3D, polyurethane derivs. 42268-97-3D, polyurethane derivs. 53269-76-4D, polyurethane derivs.

109231-80-3 109267-06-3 109315-87-9

RL: USES (Uses)

(rubber, **water-** and **oil-repellent**,
abrasion-**resistant**, with tack-free **surfaces**)

L24 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2002 ACS

AN 1987:158070 HCAPLUS

DN 106:158070

TI **Surface** treatment of woods

IN Yasuda, Ayumi; Ota, Yoshihiro

PA Matsushita Electric Works, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61129072	A2	19860617	JP 1984-251421	19841126
AB	Woods are coated with materials contg. perfluoroalkyl compds. to improved their soiling resistance. Thus, wood veneer was coated with an aminoalkyd resin contg. poly(perfluoropentylmethyl vinyl ether) and heated to give a surface with excellent soiling resistance and water and oil repellency .				
IT	37273-56-6D , reaction products with perfluorooctylsulfonylethylethanol 107760-24-7				
	RL: USES (Uses) (soilproofing coatings contg., for wood)				
RN	37273-56-6 HCAPLUS				
CN	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, polymer with 2,4-diisocyanato-1-methylbenzene (9CI) (CA INDEX NAME)				

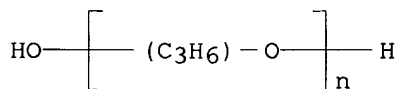
CM 1

CRN 25322-69-4

CMF (C3 H6 O)_n H2 O

CCI IDS, PMS •

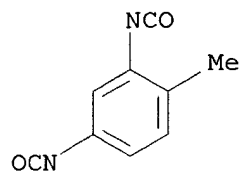
CDES 8:ID



CM 2

CRN 584-84-9

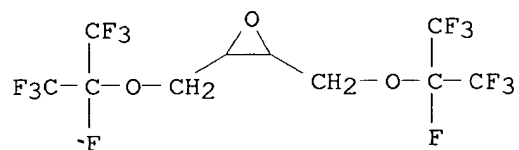
CMF C9 H6 N2 O2



RN 107760-24-7 HCAPLUS
 CN Oxirane, 2,3-bis[[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethoxy)methyl]-,
 polymer with .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 29913-45-9
 CMF C10 H6 F14 O3

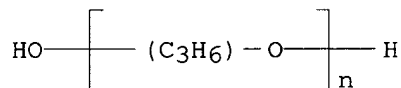


CM 2

CRN 62851-97-2
 CMF C4 H6 O2 . x (C3 H6 O)n H2 O
 CDES 8:GD,ESTER

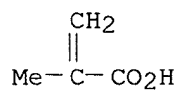
CM 3

CRN 25322-69-4
 CMF (C3 H6 O)n H2 O
 CCI IDS, PMS
 CDES 8:ID



CM 4

CRN 79-41-4
 CMF C4 H6 O2



IC ICM B05D007-06
ICS B05D005-00; B27K005-00
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 43
ST soiling resistance **coating** wood; **water repellency coating** wood; **oil resistance coating** wood; perfluoroalkyl soilproofing agent **coating** wood
IT Soilproofing
(agents, perfluoroalkyl compds., for **coatings** for wood)
IT **Coating** materials
(antisoiling, perfluoroalkyl compd. contg., for woods)
IT **Coating** materials
(**water-resistant**, contg. perfluoroalkyl compds., for wood, soilproof)
IT 9004-70-0, Cellulose nitrate
RL: TEM (Technical or engineered material use); USES (Uses)
(**coatings**, contg. perfluoroalkyl compds. as soilproofing agents, for woods)
IT 376-14-7 1691-99-2D, reaction products with polyoxypropylene glycol-2,4-tolylene diisocyanate copolymer **37273-56-6D**, reaction products with perfluorooctylsulfonylethylethanol 101232-97-7 **107760-24-7**
RL: USES (Uses)
(soilproofing **coatings** contg., for wood)

L24 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2002 ACS
AN 1986:610658 HCAPLUS
DN 105:210658

TI **Surface** treatment of wood
IN Ota, Yoshihiro; Yasuda, Ayumi
PA Matsushita Electric Works, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF

DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61171306	A2	19860802	JP 1985-12911	19850125
AB	Soiling-resistant wood is prepd. by impregnating wood with compns. contg. a H-contg. polymerizable compd. and a monomer and then curing the compn. Thus, a wood veneer was coated with a mixt. of a polyester of maleic anhydride with propylene glycol 100, CH ₂ :CHCO ₂ CH ₂ CH ₂ CF ₂ CF ₂ CF ₂ CF ₂ H 10, toluene 100, and Me Et ketone peroxide 1 part, dried, and cured at 100.degree. to give a highly soiling-resistant veneer with good resistance to water and oil.				
IT	25748-74-7D , reaction products with 1H,1H,2H,2H-heptafluorodecyl alc. 30939-44-7D , reaction products with 1H,1H,5H-octafluoropentyl alc. 105270-48-2 105270-51-7 105270-52-8 RL: USES (Uses) (soilproofing agents, for wood)				
RN	25748-74-7 HCAPLUS				
CN	1,4-Butanediol, polymer with 1,6-diisocyanatohexane (9CI) (CA INDEX NAME)				

CM 1

CRN 822-06-0
CMF C8 H12 N2 O2

OCN-(CH₂)₆-NCO

CM 2

CRN 110-63-4
CMF C4 H10 O2

HO-(CH₂)₄-OH

RN 30939-44-7 HCAPLUS
CN 1,6-Hexanediol, polymer with 1,4-diisocyanatobutane (9CI) (CA INDEX NAME)

CM 1

CRN 4538-37-8
CMF C6 H8 N2 O2

OCN-(CH₂)₄-NCO

CM 2

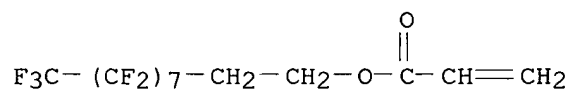
CRN 629-11-8
CMF C6 H14 O2

HO-(CH₂)₆-OH

RN 105270-48-2 HCAPLUS
CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl ester, polymer with 2,5-furandione and 2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

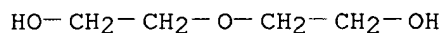
CRN 27905-45-9
CMF C13 H7 F17 O2



CM 2

CRN 111-46-6

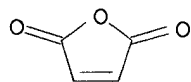
CMF C4 H10 O3



CM 3

CRN 108-31-6

CMF C4 H2 O3



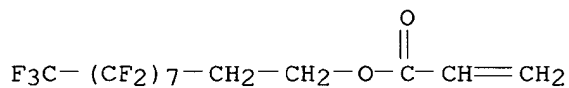
RN 105270-51-7 HCAPLUS

CN 2-Butenedioic acid (2E)-, polymer with butanedioic acid,
3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-propenoate and
2,2'-oxybis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 27905-45-9

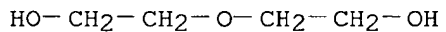
CMF C13 H7 F17 O2



CM 2

CRN 111-46-6

CMF C4 H10 O3



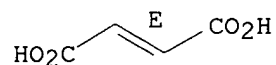
CM 3

CRN 110-17-8

CMF C4 H4 O4

CDES 2:E

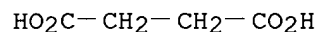
Double bond geometry as shown.



CM 4

CRN 110-15-6

CMF C4 H6 O4



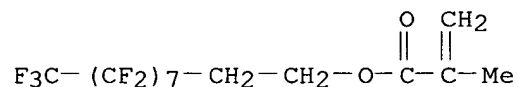
RN 105270-52-8 HCAPLUS

CN 2-Butenedioic acid (2E)-, polymer with 2,2'-[1,2-ethanediylbis(oxy)]bis[ethanol], 2,5-furandione and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 1996-88-9

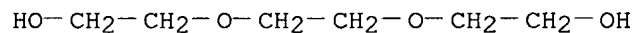
CMF C14 H9 F17 O2



CM 2

CRN 112-27-6

CMF C6 H14 O4



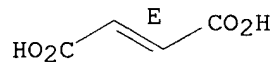
CM 3

CRN 110-17-8

CMF C4 H4 O4

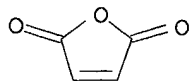
CDES 2:E

Double bond geometry as shown.



CM 4

CRN 108-31-6
CMF C4 H2 O3



IC ICM B27K003-15
CC 43-2 (Cellulose, Lignin, Paper, and Other Wood Products)
ST soilproofing wood; veneer wood soilproofing; fluoropolymer soilproofing agent wood; **waterproofing** wood; **oilproofing** wood; polyester soilproofing agent wood; polyurethane soilproofing agent wood; aminoplast soilproofing agent wood
IT Wood
(soilproofing agents for, fluorine-contg. polyurethanes, fluorine-contg. polyesters and fluorine-contg. amino resins as)
IT **Oilproofing**
Soilproofing
Waterproofing
(**agents**, fluorine-contg. polyurethanes, fluorine-contg. polyesters and fluorine-contg. amino resins as, for wood)
IT Polyesters, uses and miscellaneous
Urethane polymers, uses and miscellaneous
RL: USES (Uses)
(fluorine-contg., soilproofing agents, for wood)
IT Fatty acids, polymers
RL: USES (Uses)
(linseed-oil, polymers with phthalic anhydride, reaction products with heptadecafluorodecyl alc., soilproofing agents, for wood)
IT Fluoropolymers
RL: USES (Uses)
(polyester-, soilproofing agents, for wood)
IT Fluoropolymers
RL: USES (Uses)
(polyurethane-, soilproofing agents, for wood)
IT 85-44-9D, polymers with linseed-oil fatty acids, reaction products with 1H,1H,2H,2H-heptadecafluorodecyl alc. 355-80-6D, reaction products with adipic acid-glycerol copolymers 678-39-7D, reaction products with glycerol-phthalic anhydride copolymers 9003-08-1D, reaction products with 1H,1H,2H,2H-heptadecafluorodecylamine 9011-05-6D, reaction products with 1H,1H,2H,2H-heptadecafluorodecylamine 25035-42-1D, reaction products with 1H,1H,2H,2H-heptadecafluorodecyl alc. **25748-74-7D**, reaction products with 1H,1H,2H,2H-heptadecafluorodecyl alc. 26655-24-3D, reaction products with 1H,1H,2H,2H-heptadecafluorodecyl alc. 26913-40-6D, reaction products with 1H,1H,5H-octafluoropentyl alc. 27380-79-6D, reaction products with 1H,1H,5H-octafluoropentyl alc. 30670-30-5D, reaction products with formaldehyde-urea copolymers or formaldehyde-melamine copolymers **30939-44-7D**, reaction products with 1H,1H,5H-octafluoropentyl alc. 105238-78-6 **105270-48-2** 105270-50-6 **105270-51-7** **105270-52-8**
RL: USES (Uses)
(soilproofing agents, for wood)
L24 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2002 ACS
AN 1986:462170 HCAPLUS

DN 105:62170
 TI Blends of fluoroalkylguanidines with fluorinated polyoxyalkylenes
 IN Chang, John C.; Williams, Kathryn L.
 PA Minnesota Mining and Mfg. Co. , USA
 SO U.S., 13 pp. Cont.-in-part of U.S. Ser. No. 440,317, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4565641	A	19860121	US 1984-633977	19840724
	CA 1248274	A1	19890103	CA 1983-434873	19830818
	ZA 8308320	A	19840829	ZA 1983-8320	19831108
PRAI	US 1982-440317		19821109		

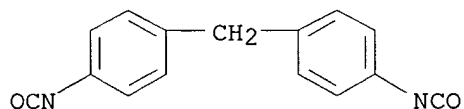
AB Mixts. of (fluoroalkyl)guanidines and polyoxyalkylenes bearing fluoroalkyl groups are useful in org. solvents or as aq. dispersions in oil- and **waterproofing** fibers. Thus, a neat oil-spin finish contg. 13.1% RZ[NHC(NBu2):NZ]2R [R = C8F17SO2N(Et)CH2CH2OCONH, Z = CH2(C6H4)2], 5.0% acrylic polymer [from C8F17SO2N(Bu)CH2CH2OCOCH:CH2 and polyethylene-polypropylene glycol mono- and diacrylate] 46.2% coconut oil-based lubricant, and 35.7% Bu(OCH2CH2)2OH was **coated** (425 ppm F) on nylon fibers which were spun to a carpet retaining 81% F after dyeing and having good **resistance** to **oil**, **water**, and walk-on soiling.

IT **101-68-8D**, reaction products with fluoro alcs. and secondary amines **103336-50-1**

RL: USES (Uses)
 (water- and **oilproofing** agents, dyeing-resistant, for textiles)

RN 101-68-8 HCAPLUS

CN Benzene, 1,1'-methylenebis[4-isocyanato- (9CI) (CA INDEX NAME)]



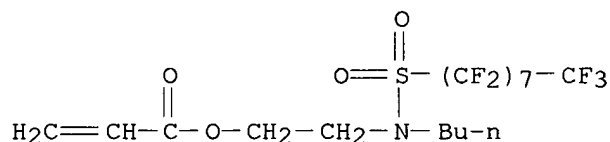
RN 103336-50-1 HCAPLUS

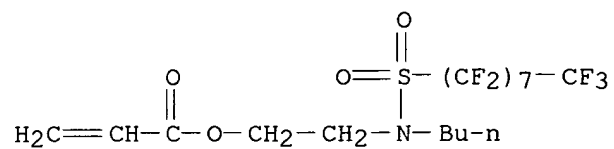
CN 2-Propenoic acid, 2-[butyl[(heptafluorooctyl)sulfonyl]amino]ethyl ester, polymer with methyloxirane polymer with oxirane di-2-propenoate and methyloxirane polymer with oxirane mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 383-07-3

CMF C17 H16 F17 N O4 S





CM 2

CRN 52503-44-3

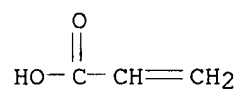
CMF (C3 H6 O . C2 H4 O)x . 2 C3 H4 O2

CDES 8:GD,ESTER

CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

CRN 9003-11-6

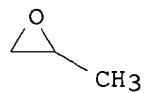
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 5

CRN 75-56-9

CMF C3 H6 O



CM 6

CRN 75-21-8

CMF C2 H4 O

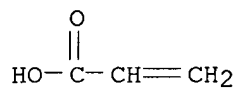


CM 7

CRN 9041-78-5
 CMF (C3 H6 O . C2 H4 O)x . C3 H4 O2
 CDES 8:GD,ESTER

CM 8

CRN 79-10-7
 CMF C3 H4 O2

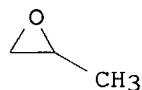


CM 9

CRN 9003-11-6
 CMF (C3 H6 O . C2 H4 O)x
 CCI PMS

CM 10

CRN 75-56-9
 CMF C3 H6 O



CM 11

CRN 75-21-8
 CMF C2 H4 O



IC ICM D06M013-08
 NCL 252008750
 CC 40-9 (Textiles)
 ST fluoropolymer finish fiber; **waterproofing** finish fiber;
 soilproofing finish fiber; **oilproofing** finish fiber; guanidine
 fluoroalkyl finish fiber; acrylate copolymer finish fiber; polyoxyalkylene
 fluoropolymer finish fiber; nylon carpet finish
 IT Carpets
 Polyamide fibers, uses and miscellaneous
 RL: USES (Uses)
 (water- and **oilproofing** agents for, (fluoroalkyl)guanidines
 and fluorinated polyoxyalkylenes as)
 IT Fluoropolymers

RL: USES (Uses)
 (water- and **oilproofing** agents, dyeing-resistant, for
 textiles)
 IT **Oilproofing**
 Soilproofing
Waterproofing
 (agents, (fluoroalkyl)guanidines and fluorinated
 polyoxyalkylenes as dyeing-resistant, for textiles)
 IT **101-68-8D**, reaction products with fluoro alcs. and secondary
 amines 110-91-8D, reaction products with MDI and fluoro alcs.
 111-92-2D, reaction products with MDI and fluoro alcs. 113-00-8D,
 fluoroalkyl derivs. 1691-99-2D, reaction products with MDI and secondary
 amines **103336-50-1**
 RL: USES (Uses)
 (water- and **oilproofing** agents, dyeing-resistant, for
 textiles)

L24 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 1986:52048 HCAPLUS
 DN 104:52048
 TI Fluorochemicals and fibrous substrates treated therewith
 IN Howells, Richard D.
 PA Minnesota Mining and Mfg. Co. , USA
 SO Eur. Pat. Appl., 59 pp.
 CODEN: EPXXDW

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 160402	A2	19851106	EP 1985-302212	19850329
	EP 160402	A3	19870916		
	EP 160402	B1	19910724		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	US 4566981	A	19860128	US 1984-595349	19840330
	ZA 8501413	A	19861029	ZA 1985-1413	19850225
	AU 8540526	A1	19851003	AU 1985-40526	19850329
	AU 577102	B2	19880915		
	JP 60226854	A2	19851112	JP 1985-66410	19850329
	JP 06099383	B4	19941207		
	US 4668726	A	19870526	US 1985-794837	19851230
PRAI	US 1984-595349		19840330		

AB Cationic and nonionic fluorochems., their mixts., blends of the mixts.
 with fluorochem. poly(oxyalkylenes), and compns. of the fluorochem. with
 hydrocarbon nonionic **surfactants** are used to treat fibrous
 substrates imparting **oil-** and **water repellency**
 and soil **resistance**. Thus, a mixt. of C8F17ZZ1(N:C:NZ1)2ZC8F17
 and C8H17ZZ1(N:C:NZ1)NHCO2C2H4N+Et3 EtSO4- (Z = SO2NEtC2H4OCONH, Z1 =
 p-C6H4CH2C6H4-p) were prep'd., mixed with Triton X-102 padded on a nylon
 carpet, dried, and dyed. The resulting dyed carpet had **oil**
repellency rating 4, **water repellency** rating
 8, and walk-on-soiling rating impressive compared to a control.

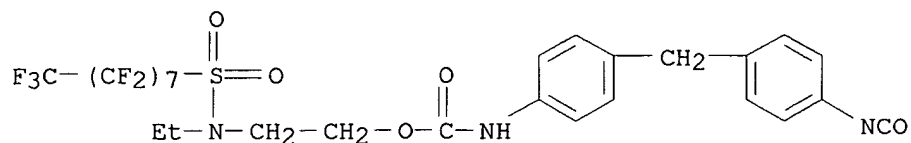
IT **99964-25-7P 99964-42-8P**

RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. and conversion to carbodiimide)

RN 99964-25-7 HCAPLUS

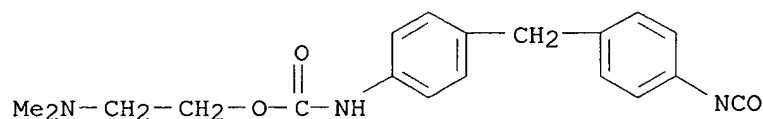
CN Carbamic acid, [4-[(4-isocyanatophenyl)methyl]phenyl]-,

2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl ester (9CI) (CA INDEX NAME)



RN 99964-42-8 HCAPLUS

CN Carbamic acid, [4-[(4-isocyanatophenyl)methyl]phenyl]-, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)



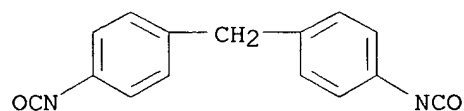
IT 101-68-8

RL: RCT (Reactant)

(reaction of, with N-ethylperfluorooctanesulfonaminoethyl alc. and dimethylaminoethanol)

RN 101-68-8 HCAPLUS

CN Benzene, 1,1'-methylenebis[4-isocyanato- (9CI) (CA INDEX NAME)

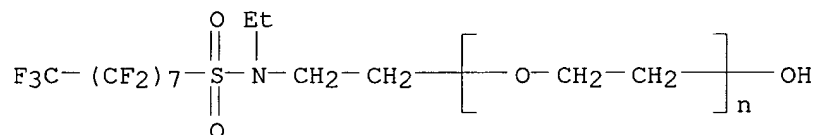


IT 29117-08-6

RL: MOA (Modifier or additive use); USES (Uses)
(soilproofing agents, for textiles)

RN 29117-08-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[ethyl[(heptadecafluorooctyl)sulfonyl]amino]ethyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IT 99963-73-2

RL: USES (Uses)

(surfactants, in fluorochem. soilproofing compns. for textiles)

RN 99963-73-2 HCAPLUS

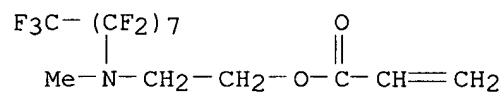
CN 2-Propenoic acid, 2-[(heptadecafluorooctyl)methylamino]ethyl ester,

polymer with methyloxirane polymer with oxirane di-2-propenoate and
methyloxirane polymer with oxirane mono-2-propenoate (9CI) (CA INDEX
NAME)

CM 1

CRN 93491-54-4

CMF C14 H10 F17 N O2



CM 2

CRN 52503-44-3

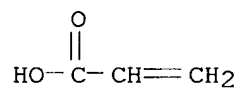
CMF (C3 H6 O . C2 H4 O)x . 2 C3 H4 O2

CDES 8:GD,ESTER

CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

CRN 9003-11-6

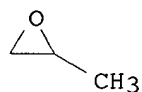
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 5

CRN 75-56-9

CMF C3 H6 O



CM 6

CRN 75-21-8

CMF C2 H4 O



CM 7

CRN 9041-78-5

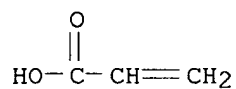
CMF (C3 H6 O . C2 H4 O)x . C3 H4 O2

CDES 8:GD,ESTER

CM 8

CRN 79-10-7

CMF C3 H4 O2



CM 9

CRN 9003-11-6

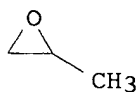
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 10

CRN 75-56-9

CMF C3 H6 O



CM 11

CRN 75-21-8

CMF C2 H4 O



IC ICM C08L033-06

ICS C08L075-02; C07C069-62; C07C127-15; D06M013-40; D06M015-576;
D21H003-54

CC 40-9 (Textiles)

ST fluorochem soilproofing **oilproofing waterproofing**

textile; **surfactant** soilproofing textile; polyamide carpet
 soilproofing fluorochem; leather **oilproofing**
waterproofing

IT Carpets
 (nylon, **waterproofing**, soilproofing and **oilproofing**
 compns. for)

IT Leather
 (**oilproofing** and **waterproofing** compns. for)

IT Polyamide fibers, uses and miscellaneous
 RL: USES (Uses)
 (soilproofing, **waterproofing** and **oilproofing**
 compns. for)

IT **Oilproofing**
 Soilproofing
Waterproofing
 (agents, cationic and nonionic fluorochems., for textiles)

IT **Surfactants**
 (nonionic, **surfactants**, in fluorochem. soilproofing compns.
 for textiles)

IT **99964-25-7P 99964-42-8P**
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. and conversion to carbodiimide)

IT 99964-26-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and quaternization of)

IT 99964-27-9P 99964-29-1P 99964-30-4P 100044-25-5P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prepn. and use as soilproofing agents for textiles)

IT **101-68-8**
 RL: RCT (Reactant)
 (reaction of, with N-ethylperfluorooctanesulfonaminoethyl alc. and
 dimethylaminoethanol)

IT 108-01-0
 RL: RCT (Reactant)
 (reaction of, with methylenebis(phenylene isocyanate) and Et alc.
 deriv.)

IT 1691-99-2
 RL: RCT (Reactant)
 (reaction of, with methylenebis(phenylene isocyanate) and
 dimethylaminoethanol)

IT 99964-34-8
 RL: USES (Uses)
 (soilproofing agents, for textile)

IT **29117-08-6** 99964-32-6 99964-36-0 99964-37-1 99964-39-3
 99964-41-7 100016-57-7 100066-53-3 100107-45-7 100107-46-8
 100107-48-0 100155-23-5 100155-24-6
 RL: MOA (Modifier or additive use); USES (Uses)
 (soilproofing agents, for textiles)

IT 9002-93-1 9005-65-6 9016-45-9 **99963-73-2**
 RL: USES (Uses)
 (**surfactants**, in fluorochem. soilproofing compns. for
 textiles)

L24 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 1977:73958 HCAPLUS
 DN 86:73958
 TI Polyurethane foam-backed pressure-sensitive adhesive tape

IN Esmay, Donald L.
 PA Minnesota Mining and Mfg. Co., USA
 SO U.S., 7 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3993833	A	19761123	US 1976-650149	19760119
	CA 1060600	A1	19790814	CA 1976-267825	19761214
	JP 52089140	A2	19770726	JP 1977-3445	19770114
	JP 55007480	B4	19800226		
	DE 2702305	A1	19770721	DE 1977-2702305	19770118
	DE 2702305	C2	19820422		
	FR 2338318	A1	19770812	FR 1977-1276	19770118
	FR 2338318	B1	19790309		
	BR 7700343	A	19770920	BR 1977-343	19770118
	GB 1531641	A	19781108	GB 1977-1953	19770118
PRAI	US 1976-650149		19760119		

AB Foam-backed pressure sensitive adhesive tape which is resistant to gasoline and water, useful in automotive applications, comprised an open-cell polyurethane foam contg. a foam stabilizing fluoroaliph. compd. having a degree of compatibility with the foam to offset the insolubilizing effect of the C-F bond and to concentrate the fluoroaliph. compd. at the foam **surface**. Thus, a polyether-polyurethane foam adhesive tape backing contg. 1.0% butyl acrylate-N-ethylperfluorooctanesulfonamidoethylacrylate-poly(oxytetramethylene)acrylate copolymer [61577-17-1] showed a gasoline repellancy of 8.5 min compared with >0.02 min for backing contg. no fluoroaliph. additive, and a similar tape contg. the additive passed the water barrier test.

IT 61577-15-9 61577-16-0

RL: USES (Uses)

(**oligomeric, urethane** polymer foam adhesive tape backings contg., gasoline- and water-resistant)

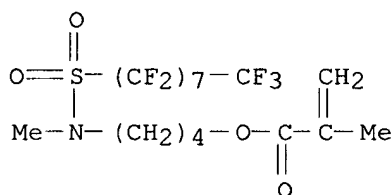
RN 61577-15-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 4-[[(heptadecafluorooctyl)sulfonyl]methylamino]butyl ester, polymer with butyl 2-propenoate, 2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethyl 2-methyl-2-propenoate and .alpha.-(1-oxo-2-propenyl)-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,4-butanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 61577-14-8

CMF C17 H16 F17 N O4 S

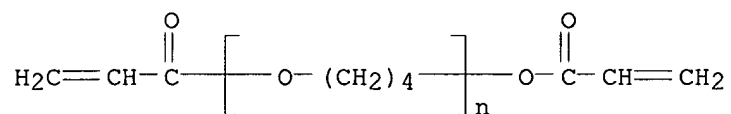


CM 2

CRN 52277-33-5

CMF (C4 H8 O)n C6 H6 O3

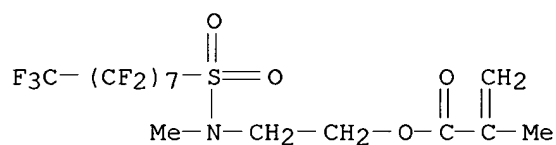
CCI PMS



CM 3

CRN 14650-24-9

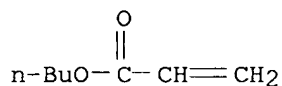
CMF C15 H12 F17 N O4 S



CM 4

CRN 141-32-2

CMF C7 H12 O2



RN 61577-16-0 HCAPLUS

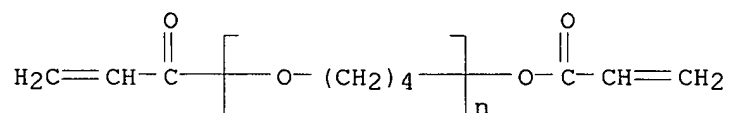
CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with
 2-[[(heptadecafluorooctyl)sulfonyl]methylamino]ethyl 2-propenoate and
 .alpha.-(1-oxo-2-propenyl)-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,4-
 butanediyl) (9CI) (CA INDEX NAME)

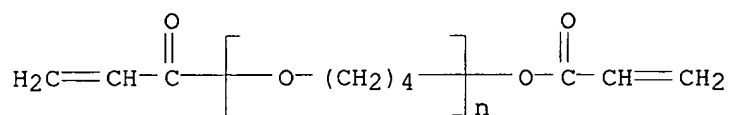
CM 1

CRN 52277-33-5

CMF (C4 H8 O)n C6 H6 O3

CCI PMS

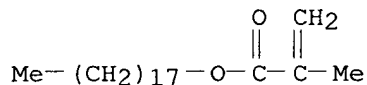




CM 2

CRN 32360-05-7

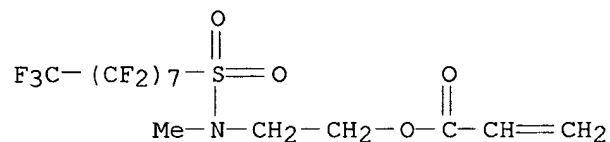
CMF C22 H42 O2



CM 3

CRN 25268-77-3

CMF C14 H10 F17 N O4 S



IT 61577-17-1 61577-38-6

RL: USES (Uses)

(oligomeric, urethane polymer foam adhesive tape
backings contg., gasoline- and water-resistant)

RN 61577-17-1 HCAPLUS

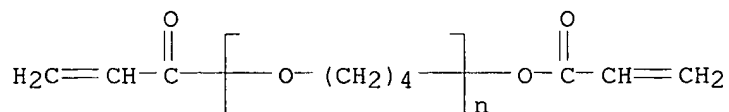
CN 2-Propenoic acid, butyl ester, polymer with 2-
[[heptadecafluorooctyl)sulfonyl]methylamino]ethyl 2-propenoate and
.alpha.-(1-oxo-2-propenyl)-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,4-
butanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 52277-33-5

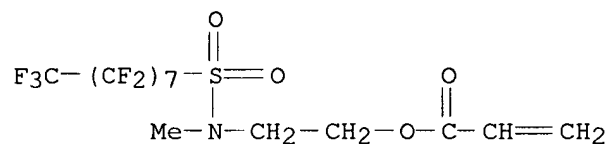
CMF (C4 H8 O)n C6 H6 O3

CCI PMS



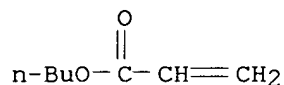
CM 2

CRN 25268-77-3
CMF C14 H10 F17 N O4 S



CM 3

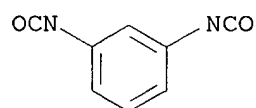
CRN 141-32-2
CMF C7 H12 O2



RN 61577-38-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxypropyl ester, polymer with butyl 2-propenoate, 1,3-diisocyanatomethylbenzene, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-N-(2-hydroxyethyl)-N-methyl-1-octanesulfonamide and 2-[[heptafluorooctyl)sulfonyl]methylamino]ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

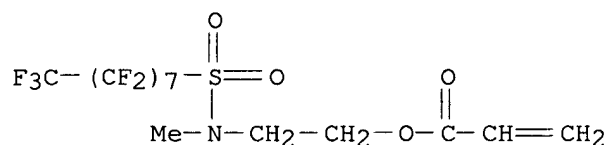
CRN 26471-62-5
CMF C9 H6 N2 O2
CCI IDS
CDES 8:ID



D1--Me

CM 2

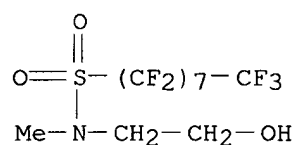
CRN 25268-77-3
CMF C14 H10 F17 N O4 S



CM 3

CRN 24448-09-7

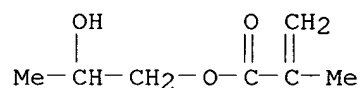
CMF C11 H8 F17 N O3 S



CM 4

CRN 923-26-2

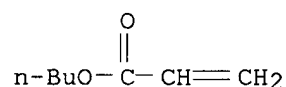
CMF C7 H12 O3



CM 5

CRN 141-32-2

CMF C7 H12 O2



IC B32B003-26

NCL 428311000

CC 37-3 (Plastics Fabrication and Uses)

ST polyurethane foam adhesive tape; fluoroaliph oligomer

polyurethane foam; gasoline resistance foam tape; water resistance foam tape

IT Urethane polymers, uses and miscellaneous

RL: TEM (Technical or engineered material use); USES (Uses)

(cellular, adhesive tape backing, contg. fluoroaliph. compd., gasoline- and water-resistant)

IT Waterproof materials and Water-repellent materials

(urethane polymer foam tape backings, contg. oligomeric fluoroaliph.

comps.)

IT Adhesive tapes
(pressure-sensitive, urethane polymer foam-backed, contg. fluoroaliph. compds., gasoline- and water-resistant)

IT **61577-15-9 61577-16-0**
RL: USES (Uses)
(**oligomeric, urethane** polymer foam adhesive tape backings contg., gasoline- and water-resistant)

IT **61577-17-1 61577-38-6**
RL: USES (Uses)
(**oligomeric, urethane** polymer foam adhesive tape backings contg., gasoline- and water-resistant)

IT 53659-83-9
RL: USES (Uses)
(urethane polymer foam adhesive tape backings contg., gasoline- and water-resistant)

L24 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2002 ACS
AN 1976:510229 HCAPLUS
DN 85:110229
TI Fluorine and sulfur-containing compositions
IN Hager, Robert B.; Toukan, Sameeh S.
PA Pennwalt Corp., USA
SO U.S., 10 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3948887	A	19760406	US 1974-459258	19740408
	GB 1437255	A	19760526	GB 1973-38075	19730810
	FR 2199536	A1	19740412	FR 1973-30750	19730824
	JP 49059090	A2	19740607	JP 1973-94510	19730824
	IT 990322	A	19750620	IT 1973-52171	19730824
	FR 2207934	A1	19740621	FR 1974-1251	19740115
	FR 2207934	B1	19790323		
	FR 2207927	A1	19740621	FR 1974-1253	19740115
	FR 2207948	A1	19740621	FR 1974-1252	19740115
	FR 2207948	B1	19780324		
	US 3883596	A	19750513	US 1974-459136	19740408
	US 3899484	A	19750812	US 1974-459144	19740408
	US 4113748	A	19780912	US 1974-459132	19740408
PRAI	US 1972-283886		19720825		

AB The reaction of bis[(fluoroalkylthio)methyl]methanols (adhesion promoters), obtained from perfluoroalkanethiol and epoxide, with 2,4-toluene diisocyanate gave carbamates useful as **oil** and H₂O **repellent** for leather, textiles and paper. Thus, 0.8% bis[perfluoro(7-methyloctyl)ethylthiomethyl]methyl phenyl 4-methyl-1,3-benzenedicarbamate soln. in CH₃CCl₃ was sprayed onto sueded pigskin to give a specimen with 100+ oil and 100-H₂O initial repellency rating (AATCC Std. Test method 52-1952).

IT **59544-10-4**
RL: USES (Uses)
(**oil** and **water repellent**, for cotton)

RN 59544-10-4 HCAPLUS

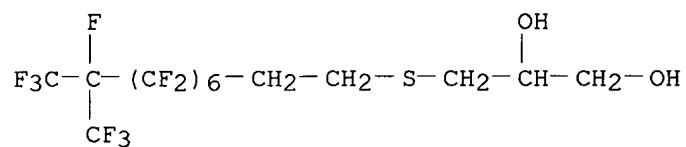
CN 1,2-Propanediol, 3-[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-

(trifluoromethyl)decyl]thio]-, polymer with aziridine,
2,4-diisocyanato-1-methylbenzene and phenol (9CI) (CA INDEX NAME)

CM 1

CRN 41945-92-0

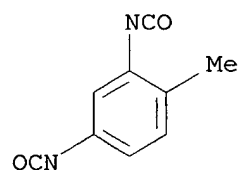
CMF C14 H11 F19 O2 S



CM 2

CRN 584-84-9

CMF C9 H6 N2 O2



CM 3

CRN 151-56-4

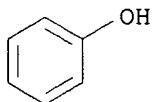
CMF C2 H5 N



CM 4

CRN 108-95-2

CMF C6 H6 O



IC C07D

NCL 260239000E
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 39, 41
 ST fluoroalkylthiomethyl carbamate **water repellent**;
oil repellent fluoroalkylthiomethyl carbamate; leather
oil water repellent
 IT **Oils**
 RL: USES (Uses)
 (-**repellents**, bis(fluoroalkylthiomethyl)methyl carbamates,
 for leather and textiles)
 IT **Waterproof** materials and **Water-repellent**
 materials
 (bis(fluoroalkylthiomethyl)methyl carbamates, for leather and textiles)
 IT Leather
 Paper
 Textiles
 (oil and **water repellents** for,
 bis(fluoroalkylthiomethyl)methyl carbamates as)
 IT **Coating** materials
 (poly(vinylidene fluoride), contg. (fluoroalkylthiomethyl)oxirane, for
 improved adhesion and flow properties)
 IT 1-Tridecanol, reaction products with bis(fluoroalkylthiomethyl)methanol,
 ethylenimine, TDI, and trimethylolpropane
 Aziridine, reaction products with bis(nonafluoroundecylthiomethyl)methanol
 , heptacosanol, toluene diisocyanate and trimethylolpropane
 Aziridine, 2-methyl-, reaction products with bis(nonafluoroundecylthiometh
 yl)methanol, toluene diisocyanate and trimethylolpropane
 Benzenemethanol, reaction products with bis(nonafluoroundecylthiomethyl)me
 thanol, methylaziridine, toluene diisocyanate and trimethylolpropane
 Ethanamine, N-ethyl-, reaction products with bis(nonafluoroundecylthiometh
 yl)methanol, methylaziridine, toluene diisocyanate and
 trimethylolpropane
 Ethanamine, N-ethyl-N-hydroxy-, reaction products with
 bis(nonafluoroundecylthiomethyl)methanol, methylaziridine, toluene
 diisocyanate and trimethylolpropane
 Ethanol, 2-[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-
 (trifluoromethyl)decyl]thio]-, reaction products with allyl alc.,
 aziridine, and TDI
 RL: USES (Uses)
 (oil and **water repellent**, for cotton
 textiles)
 IT 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, reaction products with
 bis(perfluoroalkylthiomethyl) methanol and toluene diisocyanate
 2-Propen-1-ol, reaction products with aziridine,
 bis[(fluoroalkylthio)methyl]methanols, and toluene diisocyanate
 Benzene, 2,4-diisocyanato-1-methyl-, reaction products with
 bis(perfluoroalkanethiomethyl)methanol and trimethylolpropane
 RL: USES (Uses)
 (oil and **water repellent**, for leather)
 IT 52978-08-2
 RL: USES (Uses)
 (adhesion promotor, for **coatings**)
 IT 24937-79-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**coatings**, contg. (fluoroalkylthiomethyl)oxirane, with
 improved adhesion and flow properties)
 IT 41945-92-0

RL: USES (Uses)
 (oil and water repellent manuf. from)

IT 59544-10-4
 RL: USES (Uses)
 (oil and water repellent, for cotton)

IT 52984-99-3
 RL: USES (Uses)
 (oil and water repellent, for leather and textiles)

IT 53122-44-4
 RL: USES (Uses)
 (oil and water repellent, for paper)

IT 59566-63-1
 RL: USES (Uses)
 (oil and water repellent, for textiles and paper)

IT 41946-02-5
 RL: USES (Uses)
 (oil and water repellents, for textiles)

IT 59537-50-7
 RL: USES (Uses)
 (oil repellent, for cotton-polyester fiberics)

IT 52978-11-7P 53122-43-3P
 RL: RCT (Reactant); PREP (Preparation)
 (prepn. and polymn. of)

IT 41946-08-1P 41946-09-2P 52978-09-3P 52985-02-1P 59529-52-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

IT 10025-87-3
 RL: RCT (Reactant)
 (reaction of, with bis(fluoroalkylthiomethyl)methanol)

IT 920-46-7
 RL: RCT (Reactant)
 (reaction of, with bis[(fluoroalkylthio)methyl]methanol)

IT 28505-86-4
 RL: RCT (Reactant)
 (reaction of, with epichlorohydrin)

IT 556-52-5
 RL: RCT (Reactant)
 (reaction of, with fluorinated alkanethiols)

IT 51-79-6
 RL: RCT (Reactant)
 (transesterification of, with bis[(fluoroalkylthio)methyl]methanols)

IT 106-89-8, reactions
 RL: RCT (Reactant)
 (with fluoroalkanethiols)

L24 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2002 ACS
 AN 1973:467291 HCAPLUS
 DN 79:67291
 TI Polyesters, alkyd resins, polyurethanes, and epoxy resins
 IN LaZerte, James D.; Guenther, Richard A.
 PA Minnesota Mining and Manufg. Co.
 SO Ger., 6 pp. Division of Ger. 1,240,072 (See Fr. 1,338,904, CA 60;2789c).
 CODEN: GWXXAW
 DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1620965	B2	19730517	DE 1966-M68128	19620518
	DE 1620965	C3	19731213		
	FI 40234	B	19680731	FI 1962-1160	19620614
	SE 314670	B	19690915	SE 1962-6874	19620620
	CH 484076	A	19700115	CH 1962-484076	19620621
PRAI	US 1961-136458		19610907		

AB The title polymers, useful in **coatings** and **oilproofing** of textiles and leather, are prepd. from polyols contg. perfluoroalkanesulfonamides. Thus, heating N-(2,3-dihydroxypropyl)-N-propylperfluorooctanesulfonamide 86, 2,4-tolylene diisocyanate 48.7, EtOAc 86, and Et3N 0.5 part 2 hr at 60.deg. gives a diadduct. Heating 157.8 parts this compd. and 101.3 parts polypropylene glycol (mol. wt. 2025) at 100.deg. gives N-(2,3-dihydroxypropyl)-N-propylperfluorooctanesulfonamide-polypropylene glycol-2,4-tolylene diisocyanate copolymer (I) [**39387-95-6**], which remains flexible at -70.deg. and adheres well to metals and glass. Cotton **coated** with a 0.8% CCl4 soln. of I and cured 10 min at 140.deg. shows H2O-repellency (AATCC 22-1952) 90 and **oil repellency** 70.

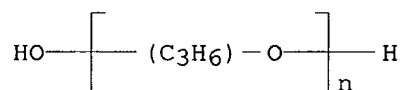
IT **39387-95-6 39410-32-7 42015-96-3 42030-02-4**
 RL: USES (Uses)
 (oil- and **water-repellents**, for leather and textiles)

RN 39387-95-6 HCAPLUS

CN 1-Octanesulfonamide, N-(2,3-dihydroxypropyl)-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-propyl-, polymer with 2,4-diisocyanato-1-methylbenzene and .alpha.-hydro-.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

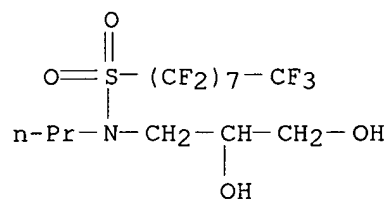
CM 1

CRN 25322-69-4
 CMF (C3 H6 O)n H2 O
 CCI IDS, PMS
 CDES 8:ID



CM 2

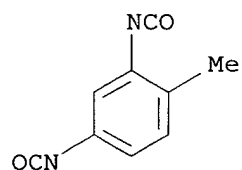
CRN 2262-49-9
 CMF C14 H14 F17 N O4 S



CM 3

CRN 584-84-9

CMF C9 H6 N2 O2



RN 39410-32-7 HCAPLUS

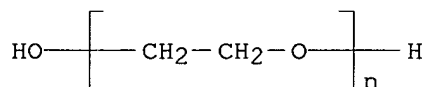
CN 1-Octanesulfonamide, N-(2,3-dihydroxypropyl)-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluoro-N-propyl-, polymer with 2,4-diisocyanato-1-methylbenzene and .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C2 H4 O)_n H2 O

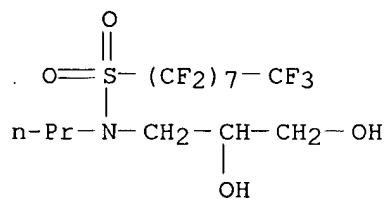
CCI PMS



CM 2

CRN 2262-49-9

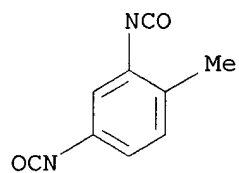
CMF C14 H14 F17 N O4 S



CM 3

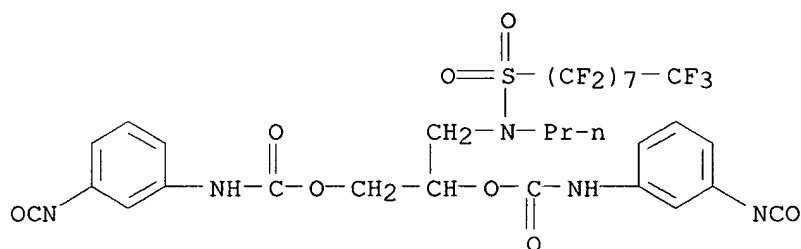
CRN 584-84-9

CMF C9 H6 N2 O2



RN 42015-96-3 HCAPLUS

CN Carbamic acid, (3-isocyanatomethylphenyl)-, 1-
 [[[(heptadecafluorooctyl) sulfonyl]propylamino]methyl]-1,2-ethanediyl ester
 (9CI) (CA INDEX NAME)



2 (D1-Me)

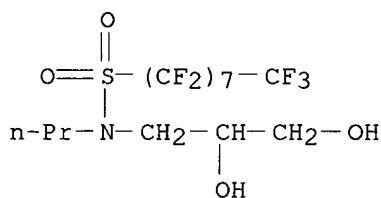
RN 42030-02-4 HCAPLUS

CN 1-Octanesulfonamide, N-(2,3-dihydroxypropyl)-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8
 ,8,8-heptadecafluoro-N-propyl-, polymer with 2,4-diisocyanato-1-
 methylbenzene and 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (9CI) (CA
 INDEX NAME)

CM 1

CRN 2262-49-9

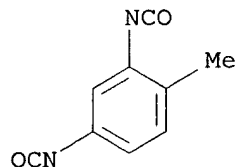
CMF C14 H14 F17 N O4 S



CM 2

CRN 584-84-9

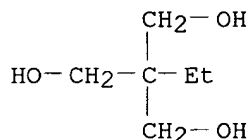
CMF C9 H6 N2 O2



CM 3

CRN 77-99-6

CMF C6 H14 O3



- IC C08G
 CC 36-3 (Plastics Manufacture and Processing)
 ST polyurethane perfluorosulfonamide deriv; fluoropolymer textile repellent;
oil repellent textile; **water repellent**
 textile; sulfonamide perfluoro polyurethane
- IT **Oils**
 RL: USES (Uses)
 (-**repellents**, perfluoroalkanesulfonamide-contg. polymers, for
 textiles and leather)
- IT Epoxy resins
 RL: USES (Uses)
 (crosslinking agents for, perfluoroalkanesulfonamide-contg. polymers
 as)
- IT **Waterproofing**
 (of leather and textiles, by perfluoroalkanesulfonamide-contg.
 polymers)
- IT Leather
 Textiles
 (**oil-** and **water-repellents** for,
 perfluoroalkanesulfonamide-contg. polymers as)
- IT Alkyd resins
 RL: USES (Uses)
 (perfluoroalkanesulfonamide deriv.-contg.)
- IT Crosslinking agents
 (perfluoroalkanesulfonamide-contg. polymers, for epoxy resins)
- IT Polyesters, uses and miscellaneous
 Urethane polymers, uses and miscellaneous
 RL: USES (Uses)

- (perfluoroalkanesulfonamide-contg., **oil-** and **water-repellents** for textiles)
- IT 1,2,3-Propanetriol, polymer with N-(2,3-Dihydroxypropyl)perfluoroalkane sulfonamides, fatty acids and phthalic anhydride
- 1,3-Isobenzofurandione, polymer with N-(dihydroxypropyl)perfluoroalkanesulfonamids, fatty acids and glycerol
- 1-Hexanesulfonamide, N-(2,3-dihydroxypropyl)-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-propyl-, polymer with fatty acids, glycerol and phthalic anhydride
- 1-Octanesulfonamide, N-(2,3-dihydroxypropyl)-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-N-propyl-, polymer with fatty acids, glycerol and phthalic anhydride
- 1-Octanesulfonamide, N-(2,3-dihydroxypropyl)-N-ethyl-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, polymer with fatty acids, glycerol and phthalic anhydride
- RL: PREP (Preparation)
(prepn. of)
- IT 42030-03-5
RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agents, for epoxy resins)
- IT **39387-95-6 39410-32-7 42015-96-3**
42030-02-4
RL: USES (Uses)
(**oil-** and **water-repellents**, for leather and textiles)
- IT 1682-11-7P 42030-00-2P 42030-01-3P 42030-04-6P 42133-41-5P
RL: PREP (Preparation)
(prepn. of)
- IT 4151-50-2
RL: RCT (Reactant)
(reaction of, with ethylene glycol)
- IT 96-24-2
RL: RCT (Reactant)
(reaction of, with ethylperfluorooctanesulfonamide)
- IT 41997-13-1
RL: RCT (Reactant)
(reaction of, with chloropropanediol)

INVENTOR SEARCH

09/592,254

May 13, 2002

L9 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:522273 HCAPLUS

DN 135:242905

TI New aqueous dispersions of fluorinated non-ionic polyurethanes

AU Levi, M.; Castoldi, L.; Turri, S.; Trombetta,

T.

CS Dipartimento di Chimica Industriale e Ingegneria Chimica "G.Natta"
Politecnico di Milano, Milan, 20133, Italy

SO Materials Engineering (Modena, Italy) (2001), 12(2), 265-276
CODEN: MSEGUE; ISSN: 1120-7302

PB MUCCHI EDITORE s.r.l

DT Journal

LA English

AB Fluorinated polymers are well known as high performance materials due to their durability, surface properties and chem. resistance. In the last years, in order to accomplish new environmental requirements, all efforts tend to develop new application systems based on aq. polymer dispersions or emulsions. New aq. dispersion of fluorinated non-ionic polyurethanes are prep'd. by a step process. In the first step, a fluorinated isocyanate end-capped prepolymer has been obtained by reaction of a cycloaliph. diisocyanate with a fluorinated macrodiol in the presence of solvent. The following chain extension has been carried out by reaction of the prepolymer with polyethylene glycol. Particular attention has been given to both the thermal and surface properties of the polymers and the rheol. properties of their dispersions. These polymer structures show good dispersibility, tunable viscosity of their dispersions, peculiar characteristics of moderate hydrophilicity and oleophobicity. Thanks to these properties this new class of polymeric materials provides new opportunities for the applications in advanced technol. fields.

IT 360774-98-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and characterization of aq. dispersions of fluorinated nonionic polyurethanes)

RN 360774-98-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, polymer with Fomblin Z-DOL and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, block (9CI) (CA INDEX NAME)

CM 1

CRN 107852-51-7

CMF Unspecified

CCI PMS, MAN

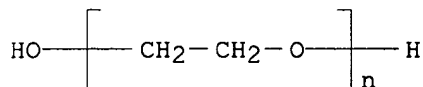
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

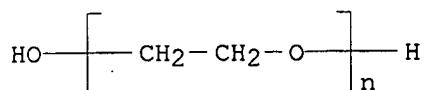
CRN 25322-68-3

CMF (C2 H4 O)n H2 O

CCI PMS



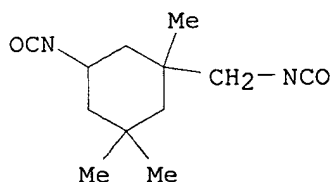
(C2H4O)n CH4O



CM 3

CRN 4098-71-9

CMF C12 H18 N2 O2



CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 35, 38

ST fluorinated nonionic polyurethane aq dispersion

IT Polyurethanes, preparation
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (fluorine-contg.; prepn. and characterization of aq. dispersions of
 fluorinated nonionic polyurethanes)

IT Fluoropolymers, preparation
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (polyurethane-; prepn. and characterization of aq. dispersions of
 fluorinated nonionic polyurethanes)

IT Flow
 Fusion enthalpy
 Glass transition temperature
 Polydispersity
 Polymerization
 Surface tension
 Viscosity
 (prepn. and characterization of aq. dispersions of fluorinated nonionic
 polyurethanes)

IT Strain
 (shear rate-dependent; prepn. and characterization of aq. dispersions
 of fluorinated nonionic polyurethanes)

IT **360774-98-7P**
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and characterization of aq. dispersions of fluorinated nonionic
 polyurethanes)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS
 AN 2000:879696 HCAPLUS
 DN 134:164496
 TI Catalyst effect on the crosslinking kinetics of a fluorine containing
 polyurethane network
 AU Turri, S.; Trombetta, T.; Levi, M.
 CS Centro Ricerche e Sviluppo Ausimont S.p.A., Bollate, 20021, Italy

SO Macromolecular Materials and Engineering (2000), 283, 144-152

CODEN: MMENFA; ISSN: 1438-7492

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

AB A bicomponent fluorinated polyurethane coating was obtained by crosslinking a bifunctional, OH-terminated perfluoropolyether oligomer with a fluorinated polyisocyanate based on isophorone diisocyanate cyclic trimer. Three different tin contg. catalysts [dibutyltin dilaurate (DBTDL), dibutyltin dimercaptide (DBTDM), and tin octoate (TO)] were evaluated during the crosslinking reaction through gel time measurements and IR spectroscopy at 15-45.degree.C. Both methods showed a substantially higher activity for DBTDL and DBTDM, with TO being almost ineffective (latent) at ambient temp. The spectroscopic measurements allowed the detn. of apparent second-order kinetic consts. of the crosslinking reaction. The activation energies in the temp. range considered were obtained from the corresponding Arrhenius plot, showing a temp. dependence higher for DBTDM than DBTDL (8.5 vs. 7.0 kcal/mol). Finally, the conversion of the crosslinking reaction on a dry polymer film was estd. to be around 60-80% after 8 h at ambient temp. with DBTDM and DBTDL, but only 20-25% for TO-catalyzed reactions. The formation of a hard urethane phase having a glass transition temp. higher than the crosslinking temp. was considered as the main limiting factor of the overall reaction rate.

IT 325158-53-0, Fomblin Z-DOL-Vestanat T 1890 copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

RN 325158-53-0 HCAPLUS

CN Fomblin Z-DOL, polymer with Vestanat T 1890 (9CI) (CA INDEX NAME)

CM 1

CRN 107852-51-7

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 73666-46-3

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 77-58-7, Dibutyltin dilaurate 301-10-0, Tin

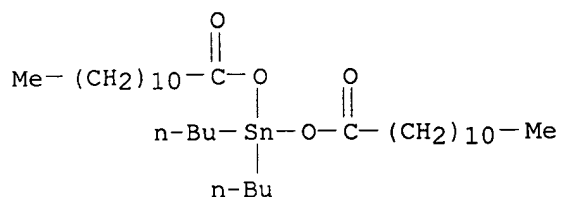
bis(2-ethylhexanoate)

RL: CAT (Catalyst use); USES (Uses)

(catalyst; effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

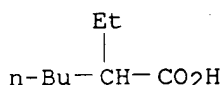
RN 77-58-7 HCAPLUS

CN Stannane, dibutylbis[(1-oxododecyl)oxy]- (9CI) (CA INDEX NAME)



RN 301-10-0 HCAPLUS

CN Hexanoic acid, 2-ethyl-, tin(2+) salt (8CI, 9CI) (CA INDEX NAME)



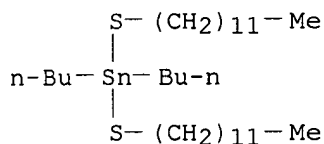
● 1/2 Sn(II)

IT 1185-81-5, Dibutyltin bis(lauryl mercaptide)

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(tin catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

RN 1185-81-5 HCAPLUS

CN Stannane, dibutylbis(dodecylthio)- (8CI, 9CI) (CA INDEX NAME)



CC 42-3 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37

ST fluoropolymer polyurethane coating crosslinking kinetics catalyst; tin catalyst crosslinking fluoropolymer polyurethane coating

IT Coating materials

Crosslinking kinetics

(catalyst effect on crosslinking kinetics of fluorine-contg.

polyurethane coating)

IT Polyurethanes, uses

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(polyether-, fluorine-contg.; catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

IT Fluoropolymers, uses

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(polyether-polyurethane-, catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

IT Polyethers, uses

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (polyurethane-, fluorine-contg.; catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

IT Crosslinking catalysts
 (tin catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

IT 325158-53-0, Fomblin Z-DOL-Vestanat T 1890 copolymer
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

IT 77-58-7, Dibutyltin dilaurate 301-10-0, Tin bis(2-ethylhexanoate)
 RL: CAT (Catalyst use); USES (Uses)
 (catalyst; effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

IT 1185-81-5, Dibutyltin bis(lauryl mercaptide)
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (tin catalyst effect on crosslinking kinetics of fluorine-contg. polyurethane coating)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
 AN 2000:876782 HCAPLUS
 DN 134:43472
 TI Fluorinated oligourethanes
 IN Turri, Stefano; Levi, Marinella; Trombetta, Tania
 PA Ausimont S.p.A., Italy
 SO Eur. Pat. Appl., 17 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1



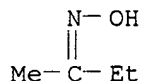
European Equiv.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1059319	A2	20001213	EP 2000-112141	20000606
	EP 1059319	A3	20020123		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2001019736	A2	20010123	JP 2000-176155	20000612
PRAI	IT 1999-MI1303	A	19990611		

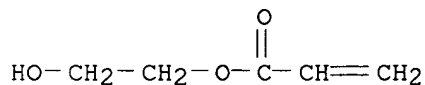
AB Fluorinated oligourethanes, having no. av. mol. wt. lower than or equal to 9,000 and a branched structure, are formed of the following monomers and macromers: (a) aliph., cycloaliph. or arom. polyisocyanates, (b) X0(CR1AR2A)bY0 [R1A, R2A = H or C1-10 aliph. radical; b = 1-20; X0 = OH or SH; Y0 = anionic or cationic salifiable function or when X0 = OH, b = 1, R1A = R2A = H, and Y0 = CH2O(CH2CH2O)nMe, n = 3-20]; one or more of the following compds.: (c) bifunctional hydroxyl (per)fluoropolyethers (PFPE diols) having no. av. mol. wt. in the range 400-3,000, (e) monofunctional hydroxyl (per)fluoropolyethers or monofunctional hydroxyl (per)fluoroalkanes (e'), having no. av. mol. wt. in the range 300-1,000; and, optionally, the following compds.: (d) X0(CR1AR2A)bY0 (R1A, R2A, b, and X0 = same as above; Y0 = oxiranyl, OCOR1BC:CH2, Si(ORx)3, CH2CH:CH2,

or OCH:CH₂; R₁B = H or Me; R_x = C₁-5 alkyl); (d₁) hydrogen-active compds., capable to form bonds with the NCO functions stable at the hydrolysis but weak at heat. These oligourethanes are useful as water- and oil-repellent coatings for substrates with high porosity. A typical IPDI-based oligourethane was manufd. by stirring a soln. contg. 45 g Vestanat T1890, 51 g EtOAc, 6.189 g dimethylaminopropanol, 0.6 mL 20% Fascat 4224 soln. 1 h at 70.degree., adding 240 g EtOAc and 68.1 g HOCH₂CF₂O(CF₂CF₂O)_p(CF₂O)_qCF₂CH₂OH (p/q = 2.2) and heating 8 h at reflux.

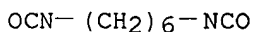
IT 96-29-7DP, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
 818-61-1DP, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
 822-06-0DP, HDI, polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes, reaction products with dimethylaminopropanol
 3179-63-3DP, 3-(Dimethylamino)propanol, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes
 4098-71-9DP, IPDI, polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes, reaction products with dimethylaminopropanol
 73666-46-3DP, Vestanat T1890, polymers with polyoxyperfluoroalkylene diols, reaction products with dimethylaminopropanol 138861-14-0DP, Tolonate HDT-LV, polymers with polyoxyperfluoroalkylene diols, reaction products with dimethylaminopropanol 313273-48-2DP, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
 RN 96-29-7 HCAPLUS
 CN 2-Butanone, oxime (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 818-61-1 HCAPLUS
 CN 2-Propenoic acid, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)



RN 822-06-0 HCAPLUS
 CN Hexane, 1,6-diisocyanato- (9CI) (CA INDEX NAME)

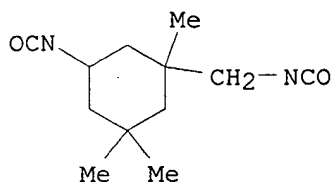


RN 3179-63-3 HCAPLUS
 CN 1-Propanol, 3-(dimethylamino)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

HO-(CH₂)₃-NMe₂

RN 4098-71-9 HCAPLUS

CN Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl- (9CI) (CA INDEX NAME)



RN 73666-46-3 HCAPLUS

CN Vestanat T 1890 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

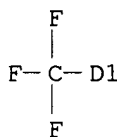
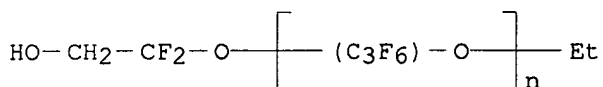
RN 138861-14-0 HCAPLUS

CN Tolonate HDT-LV (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 313273-48-2 HCAPLUS.

CN Poly[oxy(trifluoro(trifluoromethyl)-1,2-ethanediyl)], .alpha.-[chlorotrifluoro(trifluoromethyl)ethyl]-.omega.-(1,1-difluoro-2-hydroxyethoxy)- (9CI) (CA INDEX NAME)



D1-Cl

3 (D1-F)

IC ICM C08G018-38

ICS C08G018-50

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

ST fluorine contg oligourethane waterproof oilproof coating porous substrate; dimethylaminopropanol modified polyoxyperfluoroalkylene oligourethane

- manuf
- IT Coating materials
(oil-resistant; fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
- IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyisocyanurate-polyoxyalkylene-, fluorine-contg., reaction products, with dimethylaminopropanol; fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
- IT Fluoropolymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyisocyanurate-polyoxyalkylene-polyurethane-, reaction products, with dimethylaminopropanol; fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
- IT Polyoxyalkylenes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyisocyanurate-polyurethane-, fluorine-contg., reaction products, with dimethylaminopropanol; fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
- IT Polyisocyanurates
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyoxyalkylene-polyurethane-, fluorine-contg., reaction products, with dimethylaminopropanol; fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
- IT Coating materials
(water-resistant; fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)
- IT **96-29-7DP**, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
818-61-1DP, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
822-06-0DP, HDI, polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes, reaction products with dimethylaminopropanol
3179-63-3DP, 3-(Dimethylamino)propanol, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes
4098-71-9DP, IPDI, polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes, reaction products with dimethylaminopropanol
73666-46-3DP, Vestanat T1890, polymers with polyoxyperfluoroalkylene diols, reaction products with dimethylaminopropanol **138861-14-0DP**, Tolonate HDT-LV, polymers with polyoxyperfluoroalkylene diols, reaction products with dimethylaminopropanol **313273-48-2DP**, reaction products with polyisocyanurate-polyoxyperfluoroalkylene-polyurethanes and dimethylaminopropanol
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fluorinated oligourethanes for water- and oil-resistant coatings for porous substrates)